



RUGGEDIZED RJ45 AND USB

SUPERSEAL™

CONNECTORS AND ACCESSORIES

IAW: MIL-DTL-38999 • MIL-DTL-5015 • MIL-DTL-26482 • MIL-DTL-28840 • SR. 80 MIGHTY MOUSE

MAY 2016

RUGGEDIZED
RJ45 AND USB
CONNECTORS

SUPERSEAL™

CONNECTORS AND ACCESSORIES



Glenair supplies the world's most comprehensive line of ruggedized, field RJ45 Ethernet and USB connectors. The entire series is optimized for high-speed RJ45 and USB protocol applications in industrial and military environments such as rail, naval, shipboard, and soldier-system communications. SuperSeal™ enables commercial standard RJ45 and USB connectors to perform their important connectivity functions in mil-spec application environments requiring higher levels of sealing, grounding, durability, and higher-performance cable and board termination options.



SuperSeal™ Advantages

- Superior sealing— IP67 unmated and IP68 when mated—for complete system protection against water, sand and dust
- Shielded/grounded receptacle connectors
- Crimp, solder-cup, PC tail, and Quadrax contact/wire termination options
- USB 2.0 standard Type A, RJ45 Cat 5e and RJ12 with plug/jack or jack/jack interface options
- The industry's widest range of packaging options including Mil-DTL Type and Glenair ultraminiature solutions

38999 Type



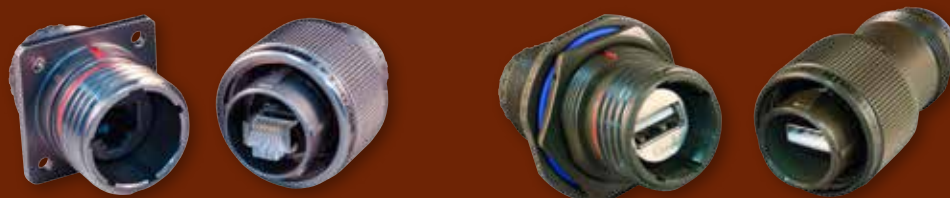
5015 Intermountable



26482 Type



28840 Type



Series 80 Mighty Mouse





SUPERSEAL™

**Ruggedized RJ45, USB, HDMI,
and DisplayPort connectors for
applications as diverse as military
ground vehicles to passenger IFE**

IP67 open-face, robust insert-to-shell
grounding, complete range of wire, cable,
and circuit board terminations

- Superior sealing—IP67 unmated—for complete system protection against water, sand and dust
- Protocols available include: USB 2.0, 3.0, and 3.2 Gen 2; Cat 5e and 6a; HDMI 2.0; and DisplayPort 2
- Shielded/grounded coupler designs in both receptacle and plug connectors
- Crimp, solder-cup, PC tail, and Quadrax contact/wire termination options
- RJ45 plug and/or jack interface options MIL-DTL-38999 type versions intermateable with other RJ45 field-duty connectors



MIL-DTL-38999 Series III
with sealed RJ45



MIL-DTL-38999 Series III
with RJ45 USB cable assemblies



High-capacity, high-speed
USB data stick



RJ45 ETHERNET, USB, HDMI, AND DISPLAY PORT Introduction and Technical Reference

SuperSeal connector overview



AVAILABLE TERMINATION OPTIONS



EXPANDED PACKAGING OPTIONS



ACCESSORIES AND TOOLS





RJ45 ETHERNET, USB, HDMI, AND DISPLAY PORT Introduction and Technical Reference



Performance specifications for Cat 5e and 6A connectors

A

RJ45 Cat 5e and Cat 6A Performance Specifications			
Property	MIL-DTL-38999 Series III Type	Series ITS 5015 Intermountable	Series IPT MIL-DTL-26482 Type
Material and Finish			
Shell/Coupling and Plating	Complete list of options available in the Material and Finish Options portion of this section		
Contacts	PC tails, solder cup, and crimp contacts: copper alloy, gold plated		
RJ45 Insulator	PPS		
Grommet, Peripheral Seal, Interfacial Seal, O-ring	Blended fluorosilicone/silicone elastomer, 30% silicone per ZZ-R-765, 70% fluorosilicone per MIL-R-25988		
Shell Sizes	17 and 19	18	18
Shielding Sleeve	Material: Copper alloy Finish: Nickel		
Electrical Specifications			
Data Rate	Cat 5e, up to one Gigabit per second (Gbps) at 100 MHz up to 100 meters / 328 feet. Cat 6A, up to 10 Gigabit per second (10 Gbps) at 500 MHz up to 100 meters / 328 feet.		
Current Rating	1.5 Amps		
D.W.V.	1000 VDC (700 VAC)		
I.R.	500 Mega ohms @ 500 VDC		
Frequency	100 MHz (Cat 5e), 500 MHz (Cat 6A)		
Wiring	Straight through		
Cabling Length	Up to 100 meters or 100 meters max.		
Shield Continuity	Continuous through coupler or continuous coupler to shell		
Environmental/Mechanical Performance			
Sealing	IP68 mated condition, IP67 unmated condition		
Outgassing	Mod Code 186S meets outgassing requirements per ASTM E 595 and meets NASA level 3 screening for standard reliability Mod Code 928 meets outgassing requirements per UL 94 V-0		
Operating Temperature	-40°C to +120°C		
Vibration	20g, 3 Axis, 10 - 2000Hz	15G sine 10Hz - 2000Hz	10G sine 10Hz - 2000Hz
Mechanical Shock	300 g's	50G - 11ms	50G - 11ms
Backshell Interface	MIL-DTL-38999, Designator H	Consult factory	
Mating System	Triple-start stub ACME	Reverse Bayonet	
Mating Cycles	500		



RJ45 ETHERNET, USB, HDMI, AND DISPLAY PORT Introduction and Technical Reference

Performance specifications for Cat 5e and 6A connectors



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RJ12 and RJ45 Cat 5e and Cat 6a Performance Specifications

Property	MIL-DTL-28840 Type (RJ12)	MIL-DTL-28840 Type (RJ45)	Series 801, 804 and 805 Mighty Mouse (RJ45)
Material and Finish			
Shell/Coupling and Plating	Complete list of options available in the Material and Finish Options portion of this section		
Contacts	PC tails, solder cup, and crimp contacts: copper alloy, gold plated		
RJ45 Insulator	PPS		
Grommet, Peripheral Seal, Interfacial Seal, O-ring	Blended fluorosilicone/silicone elastomer, 30% silicone per ZZ-R-765, 70% fluorosilicone per MIL-R-25988		
Shell Sizes	15 and 17	17 and 19	Series 801 Shell Size 17 & 19 Series 804 Shell Size 15 & 16 Series 805 Shell Size 19 & 21
Shielding Sleeve	Material: Copper alloy Finish: Nickel		
Electrical Specifications			
Data Rate	NA	Cat 5e, up to one Gigabit per second (Gbps) at 100 MHz up to 100 meters / 328 feet. Cat 6A, up to 10 Gigabit per second (10 Gbps) at 500 MHz up to 100 meters / 328 feet.	
Current Rating	1.5 Amps		
D.W.V.	1000 VDC (700 VAC)		
I.R.	500 Mega ohms @ 500 VDC		
Frequency	300 Hz - 3.4 KHZ	100 MHz (Cat 5e), 500 MHz (Cat 6A)	
Wiring	Straight through		
Cabling Length	300 meters	Up to 100 meters or 100 meters max.	
Shield Continuity	Continuous through coupler or continuous coupler to shell		
Environmental/Mechanical Performance			
Sealing	IP68 mated condition, IP67 unmated condition		
Outgassing	Mod Code 186S meets outgassing requirements per ASTM E 595 and meets NASA level 3 screening for standard reliability Mod Code 928 meets outgassing requirements per UL 94 V-0		
Operating Temperature	-40°C to +120°C		
Vibration	NA	20g, 3 Axis, 10 - 2000Hz	
Mechanical Shock	NA	300g's	
Backshell Interface	Consult factory	Consult factory	Dependent on Series
Mating System	Threaded	Threaded	801 - Double-Start Stub ACME 804 - Push/Pull 805 - Triple Start
Mating Cycles	100	500	500



Introduction and Technical Reference

Performance specifications for USB 2.0, 3.0 and 3.2 Gen 2 connectors

A

USB 2.0/3.0/3.2 Gen 2 Performance Specifications			
Property	MIL-DTL-38999 Series III Type	Series ITS 5015 Intermountable	Series IPT MIL-DTL-26482 Type
Material and Finish			
Shell/Coupling and Plating	Complete list of options available in the Material and Finish Options portion of this section		
Contacts	PC tails, solder cup, and crimp contacts: copper alloy, gold plated		
Grommet, Peripheral Seal, Interfacial Seal, O-ring	Blended fluorosilicone/silicone elastomer, 30% silicone per ZZ-R-765, 70% fluorosilicone per MIL-R-25988		
USB Insulator	LCP	PPS	
Shell Sizes	15 and 17 Consult factory for other shell size options	16	16
Electrical Specifications			
Power Usage	Up to 7.5W		
Current Rating	1.5 Amps,		
D.W.V.	500 VAC (USB 2.0), 100 VAC (USB 3.0)		
I.R.	1000 MegOhms minimum (USB 2.0), 100 MegOhms minimum (USB 3.0)		
Shielding	Continuous through coupler or continuous coupler to shell		USB housing ground to shell full shielding
Environmental/Mechanical Performance			
Sealing	IP68 mated condition, IP67 unmated condition		
Outgassing	Mod Code 186S meets outgassing requirements per ASTM E 595 and meets NASA level 3 screening for standard reliability Mod Code 928 meets outgassing requirements per UL 94 V-0		
Operating Temperature	40°C to 120°C (USB 2.0), -40°C to +85°C (USB 3.0)		
Vibration	20g's, 3 Axis, 10 - 2000Hz	10G sine 10Hz - 2000Hz	10G sine 10Hz - 2000Hz
Mechanical Shock	300 g's	50G - 11ms	50G - 11ms
Backshell Interface	MIL-DTL-38999 Designator H	Consult Factory	Designator A
Mating System	Triple-start stub ACME	Reverse Bayonet	3-Pin Bayonet
Mating Cycles	500		
USB Protocol Specific Performance (regardless of connector)			
Property	USB 2.0	USB 3.0	USB 3.2 Gen 2
Data Rate	480 MBps	5 Gbps	10 Gbps
Cabling Length	5.0 meters max.	3.0 meters max.	1.0 meter max.
Connector Compatibility	Type A	Type A	Type C



RJ45 ETHERNET, USB, HDMI, AND DISPLAY PORT Introduction and Technical Reference



Performance specifications for USB 2.0, 3.0 and 3.2 Gen 2 connectors

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USB 2.0/3.0/3.2 Gen 2 Performance Specifications			
Property	MIL-DTL-28840 Type	Series 801, 804 and 805 Mighty Mouse	
Material and Finish			
Shell/Coupling and Plating	Complete list of options available in the Material and Finish Options portion of this section		
Contacts	PC tails, solder cup, and crimp contacts: copper alloy		
Grommet, Peripheral Seal, Interfacial Seal, O-ring	Blended fluorosilicone/silicone elastomer, 30% silicone per ZZ-R-765, 70% fluorosilicone per MIL-R-25988		
USB Insulator	PPS	LCP	
Shell Sizes	15	Micro USB: Series 801 & 804 Shell Size 8 Series 805 shell Size 10 Standard USB: Series 801 Shell Size 16, Series 804 Shell Size 14, Series 805 Shell Size 18	
Electrical Specifications			
Power Usage	Up to 7.5W		
Current Rating	1.5 Amps (USB 2.0 and 3.0)		
D.W.V.	500 VAC (USB 2.0), 100 VAC (USB 3.0)	500 VAC Standard USB 2.0 100 VAC Micro USB 2.0 Mighty Mouse 100 VAC Standard USB 3.0	
I.R.	1000 MegOhms minimum (USB 2.0), 100 MegOhms minimum (USB 3.0)		
Shielding	Continuous through coupler or continuous coupler to shell		
Environmental/Mechanical Performance			
Sealing	IP68 mated condition, IP67 unmated condition		
Outgassing	Mod Code 186S meets outgassing requirements per ASTM E 595 and meets NASA level 3 screening for standard reliability Mod Code 928 meets outgassing requirements per UL 94 V-0		
Operating Temperature	-40°C to 85°C (USB 3.0) -40°C to 120°C (USB 2.0)	-40° to +120°C (Standard) -20°C to +85°C (Micro)	
Vibration	20g's, 3 Axis, 10 - 2000Hz	20g, 3 axis, 10-2000 Hz (Standard) 37.8g, 3 axis, 50-2000 Hz (Micro)	
Mechanical Shock	300 g's	300g (Standard and Micro)	
Backshell Interface	M28840, Connector Designator G	Consult Factory	
Mating System	Threaded	801 - Double-Start Stub ACME 804 - Push/Pull 805 - Triple Start	
Mating Cycles	100	2,000 (801 and 804) 500 (805)	
USB Protocol Specific Performance (regardless of connector)			
Property	USB 2.0	USB 3.0	USB 3.2 Gen 2
Data Rate	480 MBps	5 Gbps	10 Gbps
Cabling Length	5.0 meters max.	3.0 meters max.	1.0 meter max.
Connector Compatibility	Type A	Type A	Type C



Introduction and Technical Reference

HDMI performance specifications for MIL-DTL-D38999

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HDMI 2.0 Performance Specifications

Property	MIL-DTL-38999 Series III Type
Material and Finish	
Shell/Coupling and Plating	Complete list of options available in the Material and Finish Options portion of this section
Contacts	Copper alloy/gold plate
HDMI Insulator	LCP
Grommet, Peripheral Seal, Interfacial Seal, O-ring	Blended fluorosilicone/silicone elastomer, 30% silicone per ZZ-R-765, 70% fluorosilicone per MIL-R-25988
Shell Size	17 Consult factory for other shell size options
Electrical Specifications	
Data Rate	Up to 18 Gbps
Power Usage	+5.0 volts
Current Rating	0.3 Amps min.
D.W.V.	300 VAC
I.R.	100 Mega Ohms min
Cabling Length	10 Meters maximum (recommended)
Shielding	Continuous through coupler or continuous coupler to shell
Environmental/Mechanical Performance	
Sealing	IP67 unmated, IP68 mated
Outgassing	Mod Code 186S meets outgassing requirements per ASTM E 595 and meets NASA level 3 screening for standard reliability Mod Code 928 meets outgassing requirements per UL 94 V-0
Operating Temperature	-20°C to +85°C
Backshell Interface	MIL-DTL-38999 Designator H
Mating System	Triple-start stub ACME
Mating Cycles	500



RJ45 ETHERNET, USB, HDMI, AND DISPLAY PORT

Introduction and Technical Reference

DisplayPort performance specifications for MIL-DTL-D38999



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DisplayPort 1.4 Performance Specifications	
Property	MIL-DTL-38999 Series III Type
Material and Finish	
Shell/Coupling and Plating	Complete list of options available in the Material and Finish Options portion of this section
Contacts	Copper alloy/gold plate
DisplayPort Insulator	LCP
Grommet, Peripheral Seal, Interfacial Seal, O-ring	Blended fluorosilicone/silicone elastomer, 30% silicone per ZZ-R-765, 70% fluorosilicone per MIL-R-25988
Shell Size	17 Consult factory for other shell size options
Electrical Specifications	
Data Rate	25.92 Gbps maximum
Power Usage	+5.0 volts
Current Rating	5 Amps
D.W.V.	300 VAC (mated); 500 VAC (unmated)
I.R.	100 Mega Ohms min
Cabling Length	10 Meters max. (recommended)
Shielding	Continuous through coupler or continuous coupler to shell
Environmental/Mechanical Performance	
Sealing	IP67 unmated, IP68 mated
Outgassing	Mod Code 186S meets outgassing requirements per ASTM E 595 and meets NASA level 3 screening for standard reliability Mod Code 928 meets outgassing requirements per UL 94 V-0
Operating Temperature	-20°C to +85°C
Backshell Interface	MIL-DTL-38999 Designator H
Mating System	Triple-start stub ACME
Mating Cycles	500



RJ45 ETHERNET, USB, HDMI, AND DISPLAY PORT Introduction and Technical Reference



RJ45 Cat 5e and 6A TVS diode filter connector performance specifications

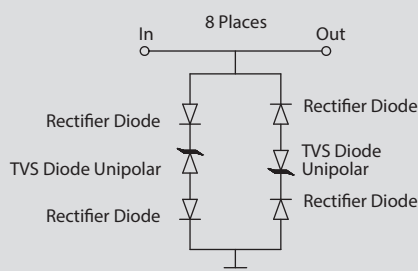
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MIL-DTL-38999 Series III, TVS Diode, RJ45 Cat 5e and 6A Performance Specifications	
Material and Finish	
Shell/coupling Plating	Complete list of options available in the Material and Finish Options portion of this section
Contacts	PC tails or solder cup: copper alloy, gold plated
RJ45 coupler housing	UL94V-0 compliant ABS or PPS
Seals	Fluorosilicone
Shell Sizes	17 and 19
Environmental / Mechanical Performance	
Sealing	IP68 mated condition, IP67 unmated condition
Outgassing	Mod Code 186S* Mod Code 928**
Operating Temperature	-20°C to +85° C LT -40 to +125° C HT
Vibration	20g's, 3 Axis, 10 - 2000Hz
Mechanical Shock	300 g's
Backshell Interface	MIL-DTL-38999 Designator H
Mating Cycles	500

* Meets outgassing requirements per ASTM E 595 and meets NASA screening requirements for level 1 highest reliability
** Meets outgassing requirements per UL 94 V-0

MIL-DTL-38999 Series III, TVS Diode, RJ45 Cat 5e and 6A Performance Specifications	
RJ45 Cat 6A & 5e Electrical Specifications	
Voltage Rating	1000 Volts, Cat 5e
Data Rate	10BASE-T, 100BASE-TX, 1000BASE-T/1000BASE-TX
Current Rating	1.5 Amps
D.W.V.	1000 VDC (700 VAC)
Frequency	100 MHz, Cat 5e 500 MHz, Cat 6A
Wiring	Straight through
Cabling Length	100 Meters Max
Shield Continuity	Continuous Through Coupler and Grounded to the Shell

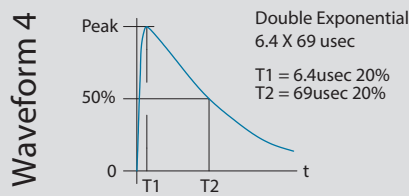
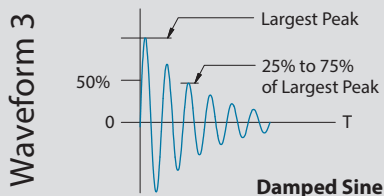
FIGURE 1



RTCA DO-160 Indirect Lightning Waveset A Waveforms		
RTCA DO-160 Waveform	Level	Open Circuit Voltage/ Short Circuit Voltage V/A
Waveform 3	1	100/4
	2	250/10
Waveform 4	1	50/10
	2	125/25

MIL-DTL-38999 Series III, TVS Diode, RJ45 Cat 5e and 6A Performance Specifications	
TVS Electrical Specifications	
Each signal line has TVS diode protection per the electrical schematic in figure 1.	
Peak pulse power (tp = 8/20us)	1,200w
Rated standoff voltage	2.8V
Minimum breakdown voltage	3.0V @ 1mA
Max clamping voltage (@ Ipp = 2A)	5.5V
Max clamping voltage (@ Ipp = 5A)	8.5V
Max clamping voltage (@ Ipp = 30A)	21.0V
Max leakage current	2.0uA max @ 2.8V
Typical junction capacitance	10pF @ 0v, 1Mhz
Polarity	bipolar
Compatible with IEC 61000-4-2 (ESD)	air - 15kv, contact - 8kv
Compatible with IEC 61000-4-4 (EFT)	40A - 5/50ns
Compatible with IEC 61000-4-5 (surge)	24A, 8/20us - level 2 (line-gnd) & level 3 (line-line)

Meets indirect lightning strike requirements per D0-160, section 22 pin injection waveform set A2.





Introduction and Technical Reference

Material and finish options for SuperSeal™ connectors

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MIL-DTL-38999 Connector and Cable Assembly Material and Finish Codes

Code	Material	Finish	Finish Specification	Hrs. Salt Spray	Electrical Conductivity	Operating Temp. Range	RoHS Compliance
ME	Aluminum	Electroless Nickel	MIL-DTL-24308 Class K	96	Yes		Yes
MT	Aluminum	Nickel PTFE	SAE AMS2454	500	Yes	-65° to +175°C	Yes
NF	Aluminum	Cadmium, Olive Drab	SAE-AMS-QQ-P-416 Type II Class 2 over electroless nickel	500	Yes	-65° to +175°C	No
ZR	Aluminum	Zinc-Nickel, Black	ASTM B841 Grade 5 over electroless nickel	500	Yes	-65° to +175°C	Yes
AB	Marine Bronze	None		1000	Yes	-65° to +200°C	Yes
XM	Composite	Electroless Nickel	AMS-C-26074	2000	Yes	-65° to +175°C	Yes
Z1	Stainless Steel	Passivate	SAE-AMS-355-AMS-QQ-P-35 Type VI	1000	Yes	-65° to +200°C	Yes

Glenair Series ITS (5015 Intermountable) Material and Finish Codes

Code	Material	Finish	Hrs. Salt Spray	Electrical Conductivity	Operating Temp. Range	RoHS Compliance
F6	Aluminum	Black Epoxy Paint	500	No	-55° to +125°C	Yes
F7	Aluminum	Black Zinc Nickel	500	Yes	-55° to +125°C	Yes
F11	Aluminum	Electroless Nickel	48	Yes	-55° to +125°C	Yes
G3	Aluminum	Cadmium, Olive Drab	500	Yes	-55° to +125°C	No

Glenair Series IPT (IAW MIL-DTL-26482) Material and Finish Codes

Code	Material	Finish	Hrs. Salt Spray	Electrical Conductivity	Operating Temp. Range	RoHS Compliance
F6	Aluminum	Black Epoxy Paint	500	No	-55° to +125°C	Yes
F7	Aluminum	Black Zinc Nickel	500	Yes	-55° to +125°C	Yes
F11	Aluminum	Electroless Nickel	48	Yes	-55° to +125°C	Yes
G3	Aluminum	Cadmium, Olive Drab	500	Yes	-55° to +125°C	No

MIL-DTL-28840 Material and Finish Options

Code	Material	Finish	Finish Specification	Hrs. Salt Spray	Electrical Conductivity	Operating Temp. Range	RoHS Compliance
NF	Aluminum	Cadmium, Olive Drab	SAE-AMS-QQ-P-416	500	Yes	-65 to +175°C	No
ZR	Aluminum	Zinc-Nickel, Black	ASTM B841	500	Yes	-65 to +175°C	Yes
MT	Aluminum	Nickel-PTFE, 1000 Hour Grey™	AMS2454	1000	Yes	-65 to +175°C	Yes
Z1	Stainless Steel	Passivate	SAE-AMS-QQ-P-35	1000	Yes	-65 to +200°C	Yes

Series 80 Mighty Mouse Material and Finish Codes

Code	Material	Finish	Finish Specification	Hrs. Salt Spray	Electrical Conductivity	Operating Temp. Range	RoHS Compliance
M	Aluminum	Electroless Nickel	AMS-C-26074	48	Yes	-65 to +200°C	Yes
MT	Aluminum	Nickel-PTFE	SAE AMS2454	500	Yes	-65 to +175°C	Yes
NF	Aluminum	Cadmium, Olive Drab	SAE-AMS-QQ-P-416	500	Yes	-65 to +175°C	No
ZNU	Aluminum	Zinc-Nickel, Black	ASTM B841	500	Yes	-65 to +175°C	No
Z1	Stainless Steel	Passivate	SAE-AMS-QQ-P-35	1000	Yes	-65 to +200°C	Yes

Consult Factory for Additional Material and Finish Options



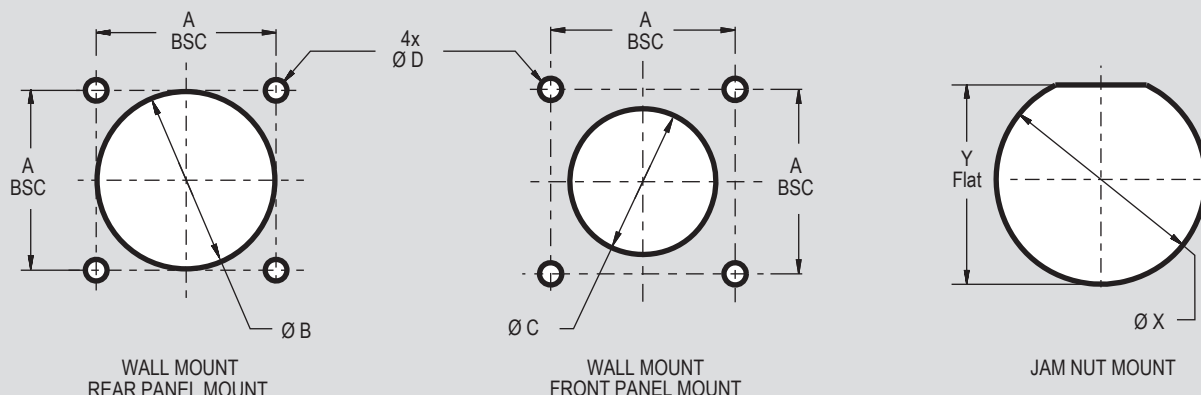
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Recommended panel cutouts for MIL-DTL-38999 Series III type connectors

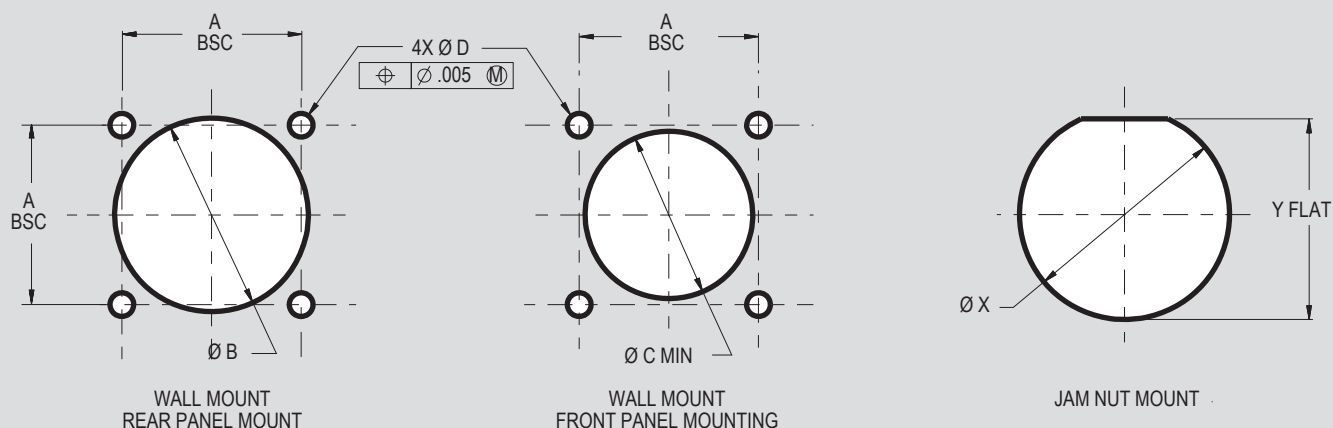
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MIL-DTL-38999 TYPE RJ45 PANEL CUTOUTS FOR SHELL SIZE 17 AND 19



Panel Cut-Out Dimensions						
Shell Size	A Bsc	B Dia Min	C Dia Min	D Holes	X Dia	Y Flat
17	1.062 (26.97)	1.219 (30.96)	1.016 (25.81)	.133 (3.38)	1.270 (32.26)	1.210 (30.73)
				.123 (3.12)	1.260 (32.00)	1.200 (30.48)
19	1.156 (29.36)	1.297 (32.94)	1.141 (28.98)		1.395 (35.43)	1.335 (33.91)
					1.385 (35.18)	1.325 (33.66)

MIL-DTL-38999 TYPE USB AND HDMI PANEL CUTOUTS FOR SHELL SIZE 15 (USB ONLY) AND 17



Panel Cut-Out Dimensions						
Shell Size	A BSC	B Dia Min	C Dia Min	D Holes	X Dia	Y Flat
15	.969 (24.61)	1.047 (26.59)	.906 (23.01)	.133 (3.38)	1.145 (29.08)	1.085 (27.56)
				.123 (3.12)	1.135 (28.83)	1.075 (27.31)
17	1.062 (26.97)	1.219 (30.96)	1.016 (25.81)*		1.270 (32.26)	1.210 (30.73)
					1.260 (32.00)	1.200 (30.48)

* Available for HDMI connectors only. Front panel mounting is not available for SuperSeal 38999 Type USB connectors.



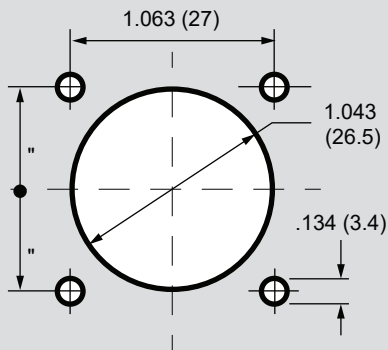
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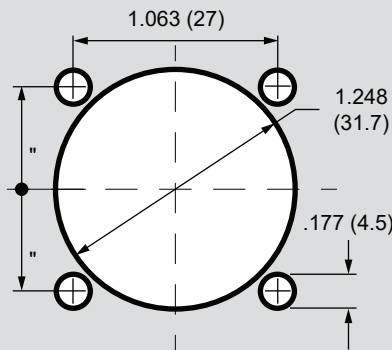
Recommended panel cutouts for Glenair Series ITS (5015 intermountable) connectors

GLENAIR SERIES ITS (MIL-DTL-5015) RJ45 PANEL CUTOUTS FOR SHELL SIZE 18

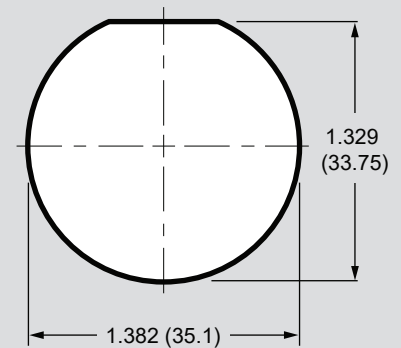
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SQUARE FLANGE
FRONT PANEL MOUNTING

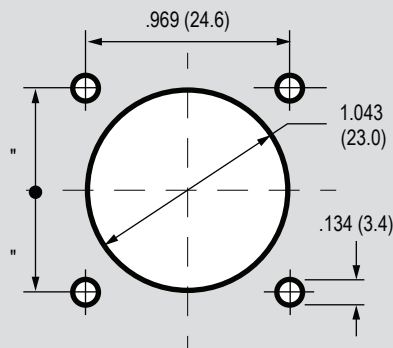


SQUARE FLANGE
REAR PANEL MOUNTING

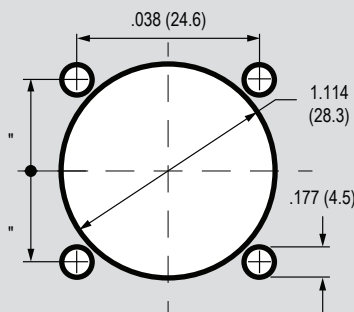


JAM NUT MOUNT

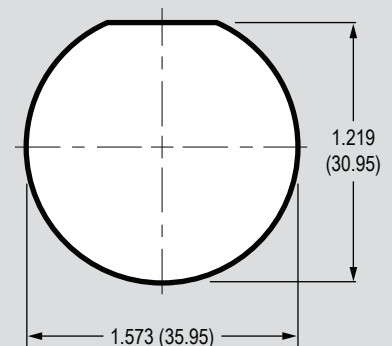
GLENAIR SERIES ITS (MIL-DTL-5015) USB PANEL CUTOUTS FOR SHELL SIZE 16



SQUARE FLANGE
FRONT PANEL MOUNT



SQUARE FLANGE
REAR PANEL MOUNT



JAM NUT MOUNT



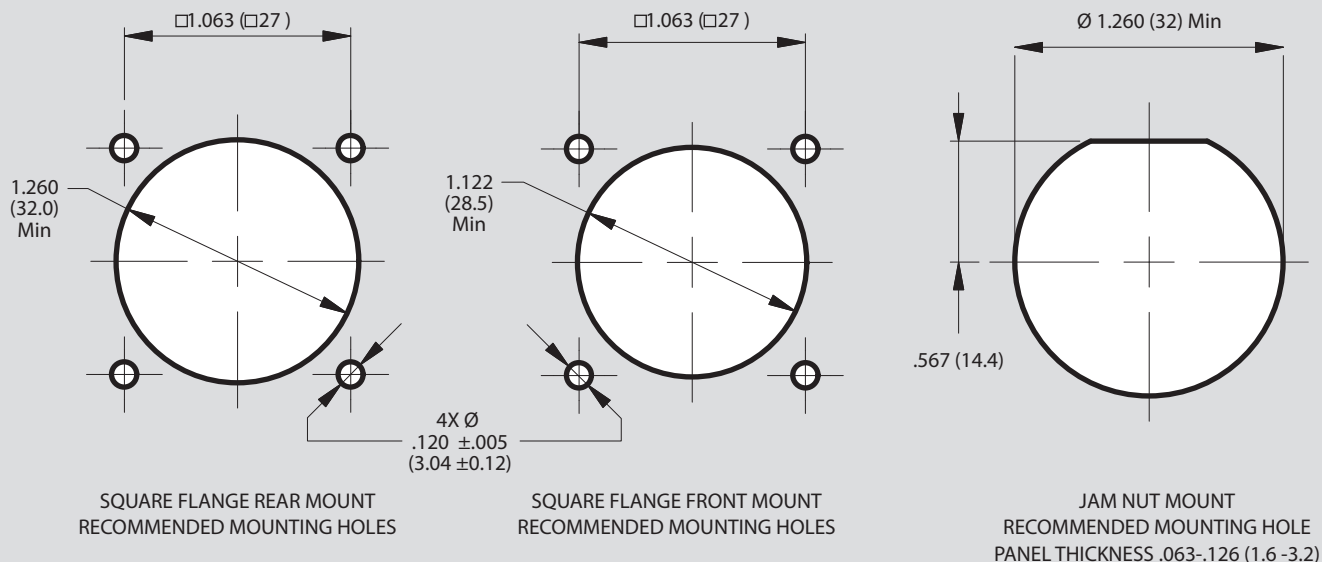
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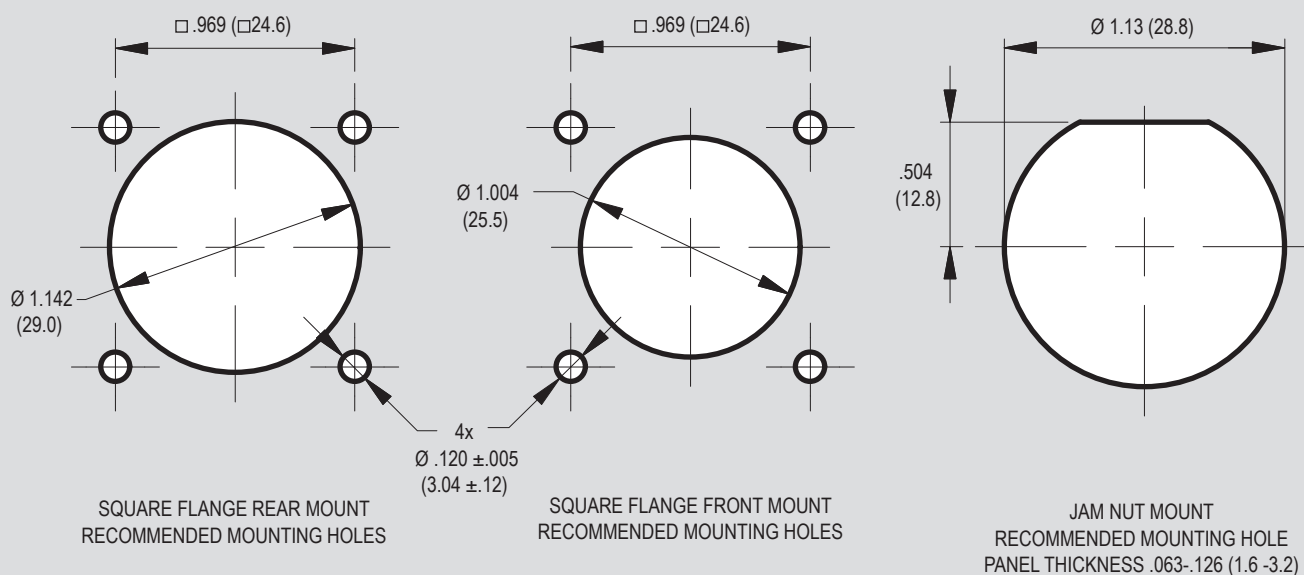
Recommended panel cutouts for Glenair Series IPT (MIL-DTL-26482 type) connectors

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GLENAIR SERIES IPT (MIL-DTL-26482 TYPE) RJ45 PANEL CUTOUTS FOR SHELL SIZE 18



GLENAIR SERIES IPT (MIL-DTL-26482 TYPE) USB PANEL CUTOUTS FOR SHELL SIZE 16





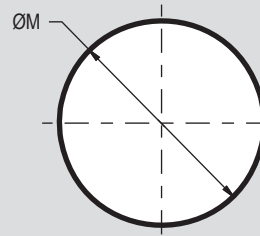
RJ45 ETHERNET, USB, HDMI, AND DISPLAY PORT Introduction and Technical Reference



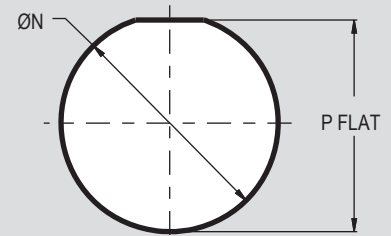
Recommended panel cutouts for MIL-DTL-28840 type connectors

MIL-DTL-28840 TYPE RJ12 PANEL CUTOUTS FOR SHELL SIZE 15 AND 17

Recommended Panel Cutouts			
Shell Size	ØM	ØN	P Flat
15	1.124 (28.55)	1.203 (30.56) 1.193 (30.30)	1.165 (29.59) 1.155 (29.34)
17	1.187 (30.15)	1.265 (32.13) 1.255 (31.88)	1.228 (31.19) 1.218 (30.94)



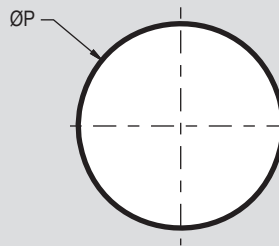
WALL MOUNT RECEPTACLE
MAX PANEL THICKNESS
.188 (4.78)



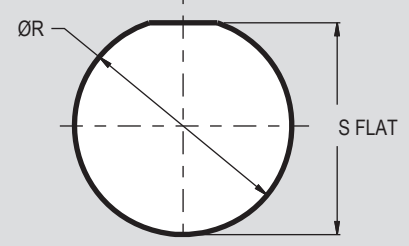
REAR PANEL MOUNT
JAM NUT RECEPTACLE
MAX PANEL THICKNESS
.188 (4.78)

MIL-DTL-28840 TYPE RJ45 PANEL CUTOUTS FOR SHELL SIZE 17 AND 19

Panel Cutouts			
Shell Size	ØP	ØR	S Flat
17	1.187 (30.15)	1.265 (32.13) 1.255 (31.88)	1.228 (31.19) 1.218 (30.94)
19	1.374 (34.90)	1.453 (36.91) 1.443 (36.65)	1.415 (35.94) 1.405 (35.69)

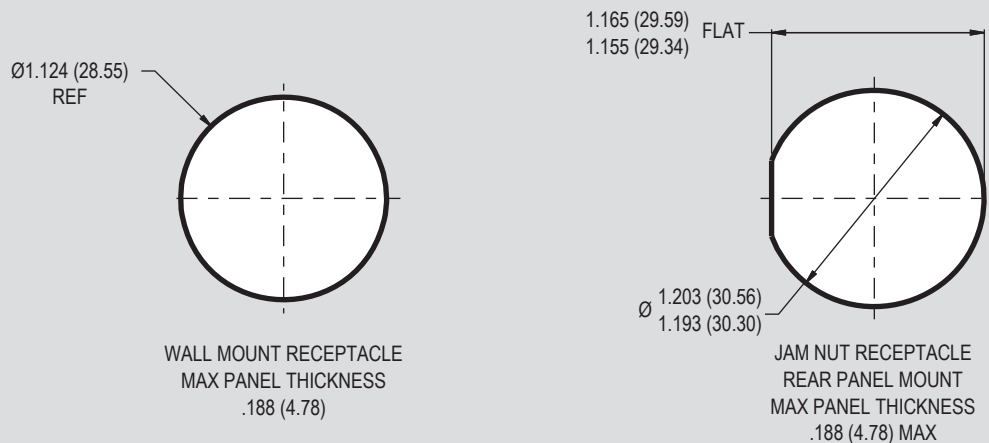


WALL MOUNT RECEPTACLE
MAX PANEL THICKNESS
.188 (4.78)



REAR PANEL MOUNT
JAM NUT RECEPTACLE
MAX PANEL THICKNESS
.188 (4.78)

MIL-DTL-28840 TYPE USB PANEL CUTOUTS FOR SHELL SIZE 15





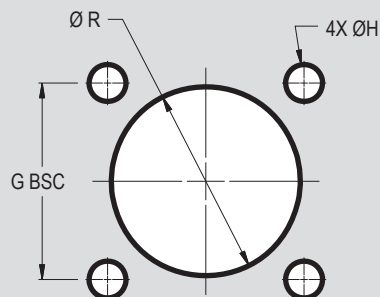
RJ45 ETHERNET, USB, HDMI, AND DISPLAY PORT Introduction and Technical Reference



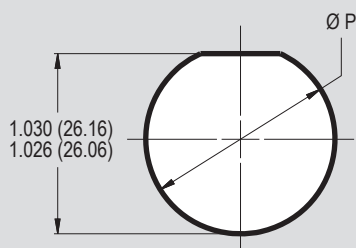
Recommended panel cutouts for Mighty Mouse Series 801, 804 and 805 connectors

A

SERIES 801 MIGHTY MOUSE RJ45 PANEL CUTOUTS FOR SHELL SIZE 17 AND 19



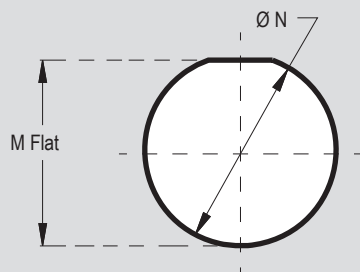
FRONT OR REAR PANEL MOUNT
SQUARE FLANGE RECEPTACLE



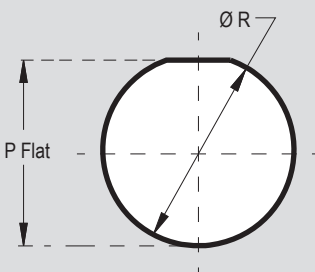
REAR PANEL MOUNT
JAM NUT RECEPTACLE

Panel Cut-Out Dimensions						
Shell Size	Mounting Style	N Flat	Ø P	G BSC	ØH Holes	Ø R
17	Jam Nut	1.104 (28.04) 1.100 (27.94)	1.135 (28.83)	-	-	-
	Square Flange	-		1.060 (26.92)	.130 (3.30) .126 (3.20)	1.078 (27.38)
19	Jam Nut	1.235 (31.67) 1.231 (31.27)	1.260 (32.00)	-	-	-
	Square Flange	-	-	1.191 (30.25)	.130 (3.30) .126 (3.20)	1.203 (30.56)

SERIES 804 USB MIGHTY MOUSE RJ45 PANEL CUTOUTS FOR SHELL SIZE 15 AND 16



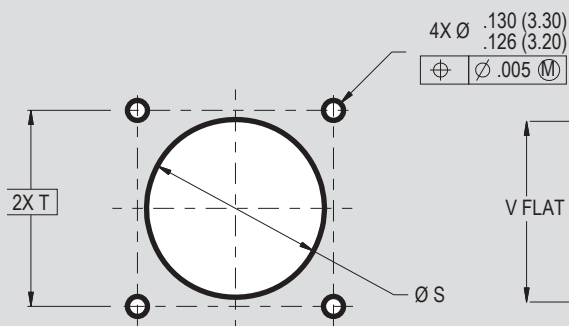
REAR PANEL MOUNT
JAM NUT RECEPTACLE



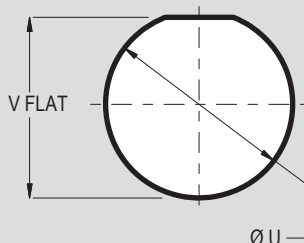
FRONT PANEL MOUNT
JAM NUT RECEPTACLE

Panel Cut-Out Dimensions					
Shell Size	Mounting Style	M Flat	Ø N	P Flat	Ø R
15	Front Mount	-	-	1.015 (25.78) 1.011 (25.68)	1.135 (28.83)
	Rear Mount	1.041 (26.44) 1.037 (26.34)	1.070 (27.18)	-	-
16	Front Mount	-	-	1.157 (29.38) 1.153 (29.27)	1.198 (30.43)
	Rear Mount	1.102 (27.99) 1.098 (27.89)	1.135 (28.83)	-	-

SERIES 805 USB MIGHTY MOUSE RJ45 PANEL CUTOUTS FOR SHELL SIZE 19 AND 21



FRONT OR REAR PANEL MOUNT
SQUARE FLANGE RECEPTACLE
(NOTE: -12 & -22 REAR MOUNT ONLY
-02 FRONT OR REAR MOUNT)



REAR PANEL MOUNT
JAM NUT RECEPTACLE

Panel Cut-Out Dimensions				
Shell Size	Ø S	T BSC	Ø U	V Flat
19	1.203 (30.56)	1.327 (33.71)	1.262 (32.05) 1.258 (31.95)	1.233 (31.32) 1.229 (31.22)
21	1.328 (33.73)	1.452 (36.88)	1.387 (35.23) 1.383 (35.13)	1.360 (34.54) 1.356 (34.44)

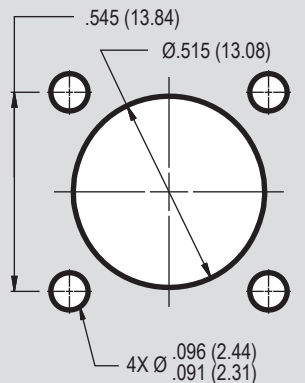


RJ45 ETHERNET, USB, HDMI, AND DISPLAY PORT Introduction and Technical Reference

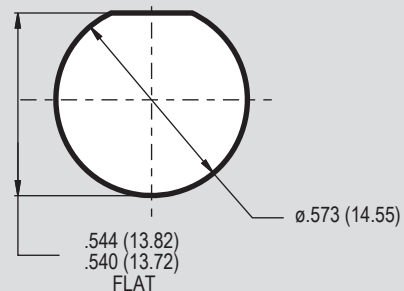


Recommended panel cutouts for Mighty Mouse series 801 and 805 “Micro” USB connectors

SERIES 801 MIGHTY MOUSE, MICRO USB PANEL CUTOUTS FOR SHELL SIZE 8

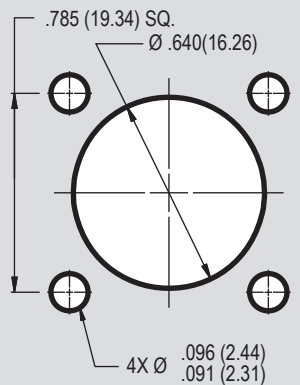


SQUARE FLANGE RECEPTACLE

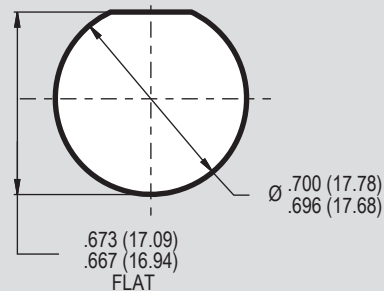


REAR PANEL MOUNT
JAM NUT RECEPTACLE

SERIES 805 MIGHTY MOUSE, MICRO USB PANEL CUTOUTS FOR SHELL SIZE 10



SQUARE FLANGE RECEPTACLE



REAR PANEL MOUNT
JAM NUT RECEPTACLE

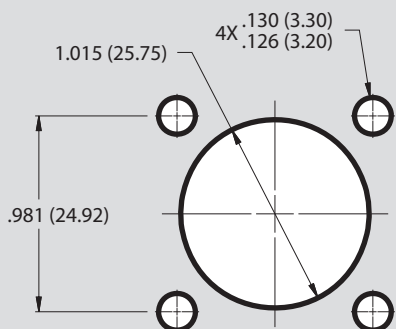


Introduction and Technical Reference

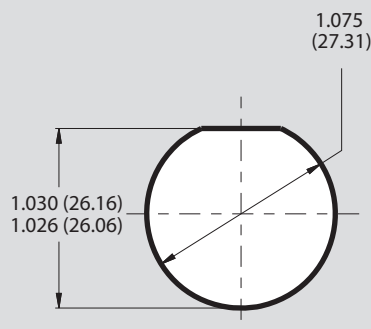
Recommended panel cutouts for Mighty Mouse Series 801, 804 and 805 connectors

A

SERIES 801 MIGHTY MOUSE, TYPE A STANDARD USB, PANEL CUTOUTS FOR SHELL SIZE 16

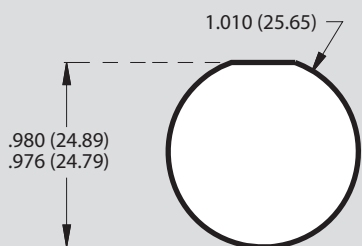


FRONT OR REAR PANEL MOUNT
SQUARE FLANGE RECEPTACLE

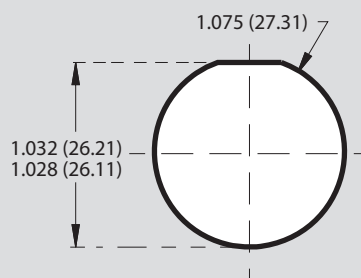


REAR PANEL MOUNT
JAM NUT RECEPTACLE

SERIES 804 USB MIGHTY MOUSE, TYPE A STANDARD USB, PANEL CUTOUTS FOR SHELL SIZE 14

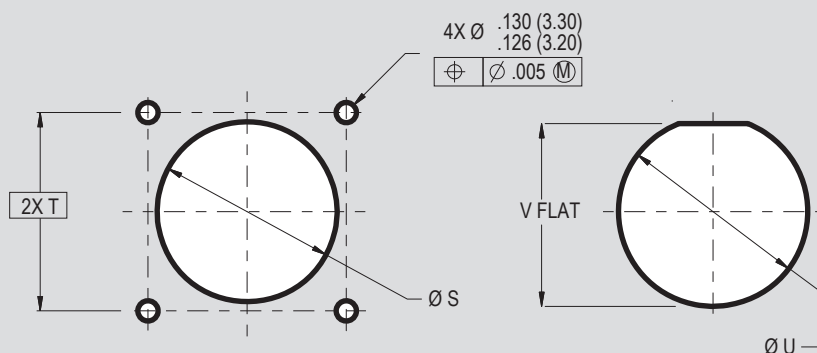


REAR PANEL MOUNT
JAM NUT RECEPTACLE



FRONT PANEL MOUNT
JAM NUT RECEPTACLE

SERIES 805 USB MIGHTY MOUSE, TYPE A STANDARD USB, PANEL CUTOUTS FOR SHELL SIZE 18



FRONT OR REAR PANEL MOUNT
SQUARE FLANGE RECEPTACLE
(NOTE: -12 & -22 REAR MOUNT ONLY
-02 FRONT OR REAR MOUNT)

REAR PANEL MOUNT
JAM NUT RECEPTACLE



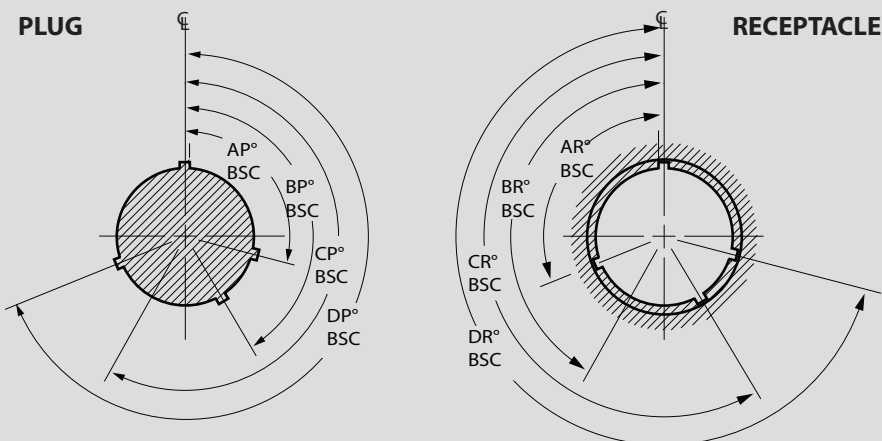
RJ45 ETHERNET, USB, HDMI, AND DISPLAY PORT Introduction and Technical Reference



Alternate key and keyway positions for MIL-DTL-38999 and MIL-DTL 28840 type connectors

MIL-DTL-38999 POLARIZATION KEY(PLUG) AND KEYWAY (RECEPTACLE) POSITIONS

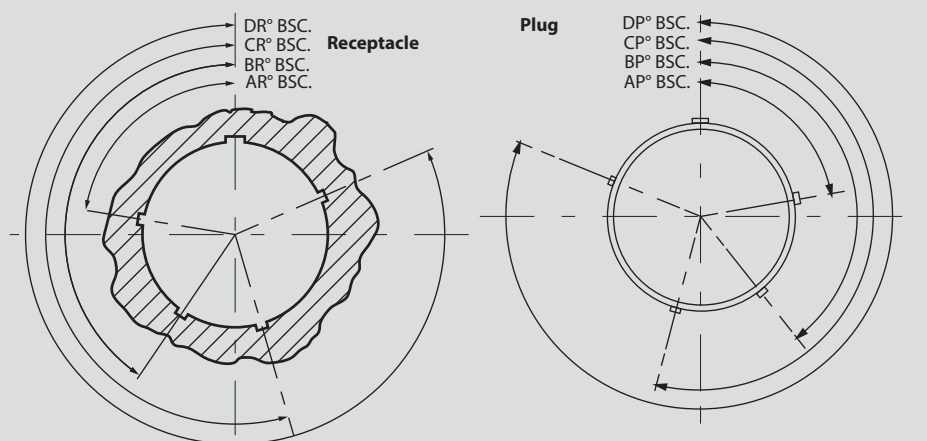
Alternate Key and Keyway Polarization					
Shell Size	Key and Keyway Code	AR° or AP° BSC	BR° or BP° BSC	CR° or CP° BSC	DR° or DP° BSC
17 19	N	80	142	196	293
	A	135	170	200	310
	B	49	169	200	244
	C	66	140	200	257
	D	62	145	180	280
	E	79	153	197	272



A

MIL-DTL-28840 POLARIZATION KEY AND KEYWAY ARRANGEMENTS

Alternate Key and Keyway Polarization					
Shell Size	Key and Keyway Code	AR° or AP° BSC	BR° or BP° BSC	CR° or CP° BSC	DR° or DP° BSC
15 (C) 17 (D)	1	80	142	196	293
	2	135	170	200	310
	3	49	169	200	244
	4	66	140	200	257
	5	62	145	180	280
	6	79	153	197	272
19 (E)	1	80	142	196	293
	2	135	170	200	310
	3	49	169	200	244
	4	66	140	200	257
	5	62	145	180	280
	6	79	153	197	272





RJ45 ETHERNET, USB, HDMI, AND DISPLAY PORT Introduction and Technical Reference

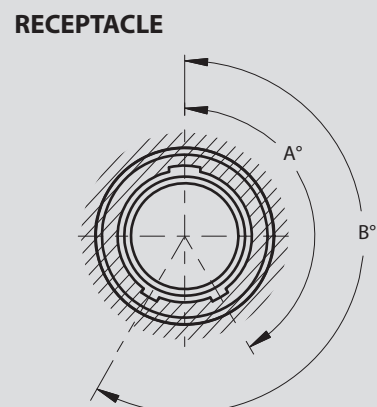
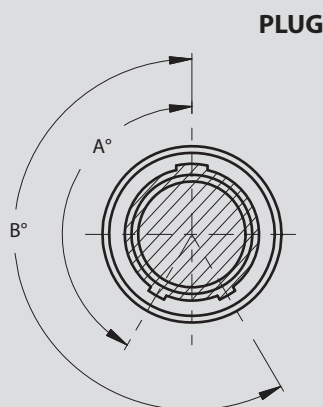


Alternate key and keyway positions for Mighty Mouse Series 801 and 805 connectors

A

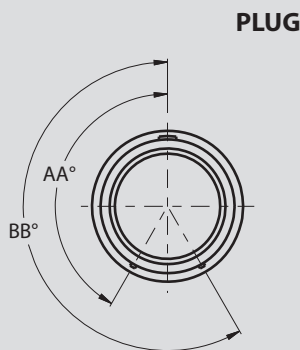
SERIES 801 MIGHTY MOUSE ALTERNATE KEY(PLUG) KEYWAY (RECEPTACLE) POSITIONS

Alternate Key Positions		
Position	A°	B°
A	150°	210°
B	75°	210°
C	95°	230°
D	140°	275°
E	75°	275°
Rev.# 1.14.23	95°	210°

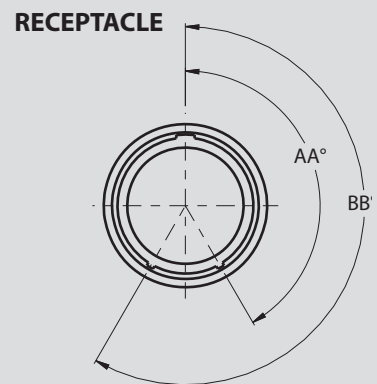


SERIES 805 MIGHTY MOUSE ALTERNATE KEY(PLUG) KEYWAY (RECEPTACLE) POSITIONS

Alternate Key and Keyway Positions		
Position	AA°	BB°
A	150°	210°
B	75°	210°
C	95°	230°
D	140°	275°
E	75°	275°
F	95°	210°



Normal and Alternate Position
Key Rotation (Plug)



Normal and Alternate Position
Keyway Rotation (Receptacle)



RJ45 ETHERNET, USB, HDMI, AND DISPLAY PORT

Introduction and Technical Reference

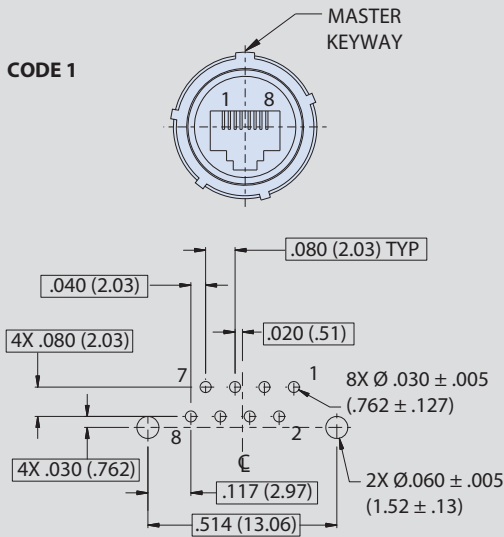
PCB Footprint and orientation options for SuperSeal™ PCB receptacles



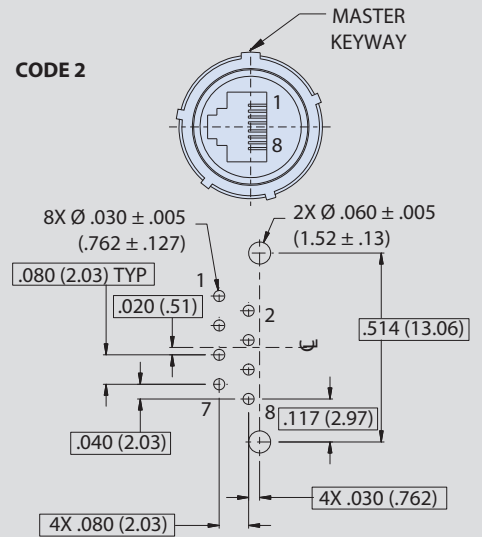
A

RJ45 PCB FOOTPRINT AND ORIENTATIONS FOR MIL-DTL-38999, 5015, 26482 AND MIGHTY MOUSE SERIES 80, SHOWN FROM SOLDER SIDE (BOTTOM) OF BOARD

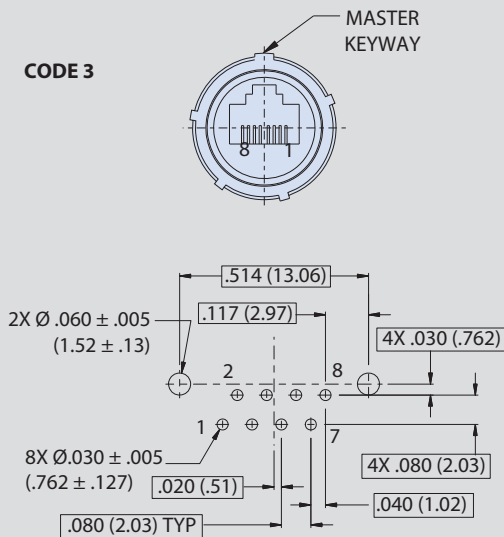
CODE 1



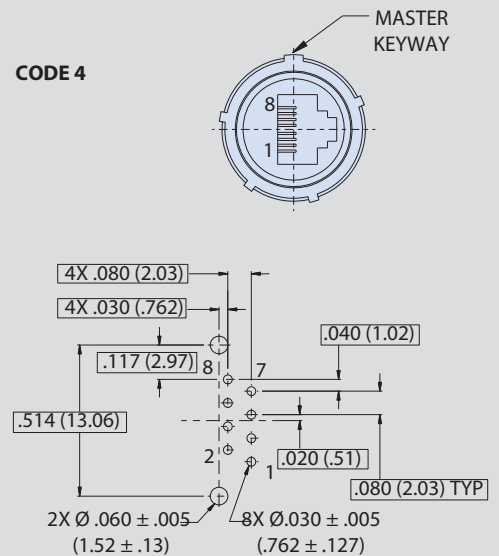
CODE 2



CODE 3



CODE 4





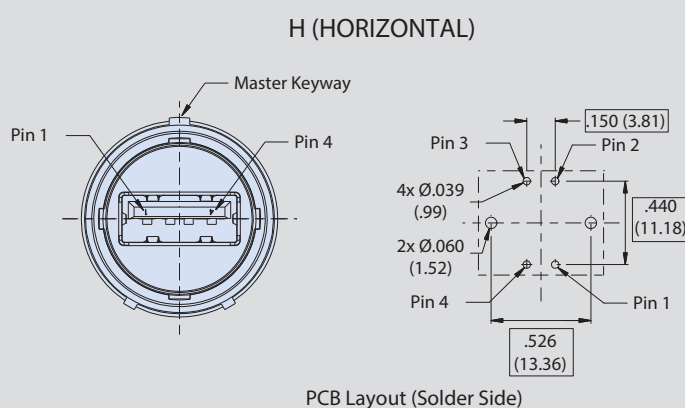
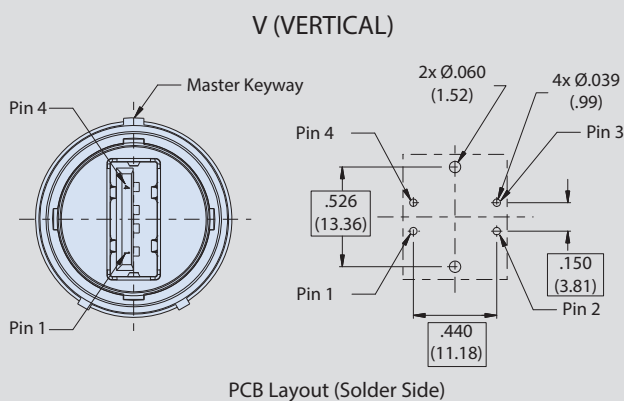
RJ45 ETHERNET, USB, HDMI, AND DISPLAY PORT Introduction and Technical Reference



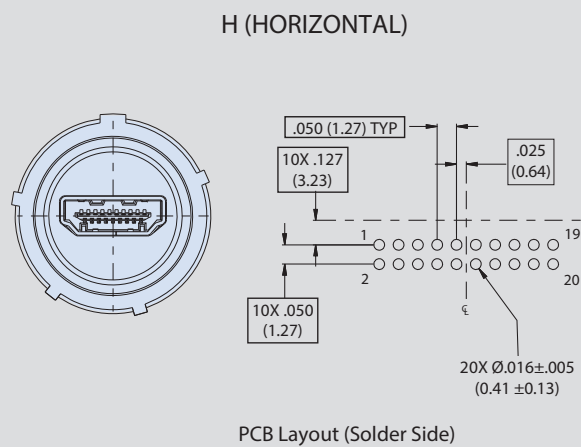
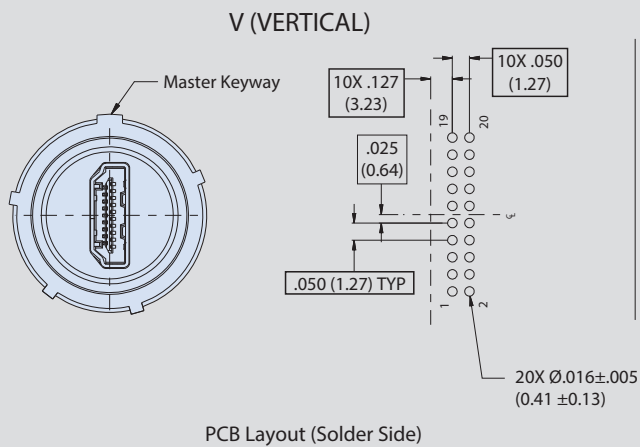
PCB footprint and orientation options for SuperSeal™ PCB receptacles

A

STANDARD USB 2.0 PCB FOOTPRINTS FOR MIL-DTL-38999, 5015, 26482 AND MIGHTY MOUSE SERIES 80, SHOWN FROM SOLDER SIDE (BOTTOM) OF BOARD



HDMI PCB FOOTPRINT AND ORIENTATIONS FOR MIL-DTL-38999, SHOWN FROM SOLDER SIDE (BOTTOM) OF BOARD





Introduction and Technical Reference

Modification codes for SuperSeal™ connectors

ASTM E595 Outgassing

MOD CODE 186S

- SuperSeal® connectors specially processed to meet ASTM E595 outgassing requirements.
- Modification code specifies special outgassing bakeout processing.
- Meets NASA Screening Level 1 requirements

Space flight equipment requires low-outgassing components in order to prevent degradation to optics and other sensitive instruments. The space industry has adopted a standardized test procedure, ASTM E595, to evaluate outgassing properties. In the ASTM test, material samples are heated to 125° C at a vacuum of 5×10^{-5} torr for 24 hours. The test sample is then weighed to calculate the Total Mass Loss (TML), which may not exceed 1.0% of the total initial mass. A collector plate is used to determine the Collected Volatile Condensable Material (CVCM), which may not exceed 0.1% of the total original specimen mass. SuperSeal™ connectors contain nonmetallic materials such as rubber, plastic, adhesives and potting compounds which can give off gases when subjected to a vacuum or high heat. Unless the connector is specially processed, the TML and CVCM can exceed allowable limits. Glenair is able to offer a bakeout process, 48 hour oven bakeout at 257° F, which assures all materials comply with ASTM E595

UL 94 V-0 Flammability Standard

MOD CODE 928

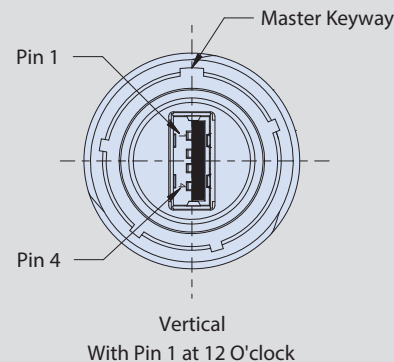
- SuperSeal® connectors specially processed to meet UL 94 V-0 flammability standard

UL 94, the Standard for Safety of Flammability of Plastic Materials for Parts in Devices and Appliances testing is a plastics flammability standard released by Underwriters Laboratories of the USA. The standard classifies plastics according to how they burn in various orientations and thicknesses. From lowest (least flame-retardant) to highest (most flame-retardant) V-0. Burning stops within 10 seconds on a vertical specimen; specimens may not drip flaming particles.

Flip Vertical USB Orientation by 180 degrees

MOD CODE 915

Flip standard, vertically oriented USB designs 180 degrees, allowing pin 1 to be located at the 12 O'clock position.





SuperSeal™

USB 3.0 connectors

The latest version of the Universal Serial Bus (USB) standard for interfacing computers and electronic devices sees a significant speed increase over the previous standard. The USB 2.0 standard offers a theoretical maximum signaling rate of 480 megabits per second, while USB 3.0 defines a maximum rate of 5 gigabits per second—more than ten times faster than USB 2.0. To achieve this, one-way communication on USB 2.0 has been dropped. USB 3.0 uses two unidirectional data paths, one to receive data and the other to transmit. USB 3.0 also provides up to 900mA of power when needed (better power management helps to conserve power when connected devices sit idle), as well as robust sealing against fluids and dust for harsh environments with 1P67-rated sealing in an unmated condition and IP68-rated when mated. Glenair connectors and cable assemblies deliver improved EMI/RFI shielding, outstanding sealing and improved shock and vibration protection. USB 3.0 is available across the following connector types: 38999, 5015 (ITS), 26482 (IPT), 28840 and Mighty Mouse. These popular connector families fill the growing need within aerospace, naval, industrial, and soldier worn, harsh-environment applications to benefit from this ubiquitous, high-speed, data transmission protocol. Military grade connector protection against water ingress, dust and debris, while maintaining signal integrity allows for USB 3.0 to be used across various applications. Glenair is committed to offering an evolving range of protocol support and termination options to meet advanced communication requirements in harsh environmental conditions.

- **USB 3.0 protocol**
- **High-speed data transmission rate of up to 5Gb/s**
- **High-sealing capability: IP67 rated in unmated condition. 1P68 rated in mated condition**
- **Available across all SuperSeal™ connector packages including D38999, 5015 (ITS), 26482 (IPT), 28840 and Mighty Mouse Series 801, 804 and 805**

MIL-DTL-38999 TYPE
FIELD-READY
RJ45 ETHERNET

SUPERSEAL™



Rugged environmental MIL-DTL-38999 type connectors with IP67 unmated sealing, robust insert-to-shell grounding, and a complete range of wire, cable, and circuit board terminations



Features

- Superior sealing—IP68 when mated—for complete system protection against water, sand and dust
- Highly durable RJ45 design, including enhanced operating temperature, increased life-cycle, and rugged vibration and shock performance
- Shielded/grounded coupler designs in both receptacle and plug connectors
- Crimp, solder-cup, PC tail, and Quadrax contact/wire termination options
- RJ45 plug and/or jack interface options available in Cat 5e or Cat 6a
- Industry standard scoop proof, self-locking, triple-start threaded coupling design of MIL-DTL-38999 Series III type connectors
- Intermateable with other MIL-DTL-38999 type RJ45 field-duty connectors



Glenair, Inc.
1211 Air Way
Glendale, CA 91201-2497
818-247-6000
sales@glenair.com
www.glenair.com



RJ45 CAT 5E/6A ETHERNET

MIL-DTL-38999 Series III Type Connectors



Product Selection Guide



233-312

E-9

SuperSeal™ CAT 6A Plug with RJ45 Male Mating Interface and Accessory Threads



233-330

E-22

SuperSeal™ CAT 5e and 6A Feed-thru Receptacle with Jack-to-Jack RJ45.



233-300

E-10

SuperSeal D38999 Type plug with CAT 5e or 6A RJ45 Plug or D38999 Type Receptacle with CAT 5e or 6A RJ45 Jack. D38999 Type Shells with Accessory Threads



Cable Assemblies

E-24

SuperSeal™ CAT 5e Cable Assemblies

B



233-301

E-12

SuperSeal™ CAT 5e Receptacle Adapter with RJ45 Mating Interface and Crimp Removable Contacts.

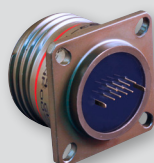


Transient Voltage

E-25

Suppression (TVS) RJ45 Connectors

Prevents Catastrophic EMP Failure in Military and Commercial Aircraft



233-302

E-14

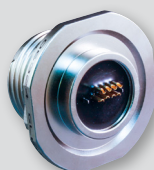
SuperSeal™ CAT 5e Receptacle with RJ45 Mating Interface and PC Tail Termination.



244-001

E-27

SuperSeal™ CAT 5e Transient Voltage Suppression, Jam-Nut Receptacle with Standoffs and RJ45 Jack to PC Tail or Solder Cup Termination.



233-303

E-16

SuperSeal™ CAT 5e Receptacle with RJ45 Mating Interface and Solder Cup Termination.



244-002

E-28

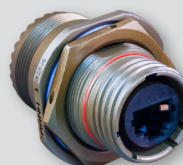
SuperSeal™ CAT 5e Transient Voltage Suppression, Wall Mount Receptacle with Standoffs and RJ45 Jack, Mating Interface to PC Tail or Solder Cup.



233-304

E-18

SuperSeal™ CAT 5e MIL-STD-1560 Interface Receptacle Adapter with Accessory Threads and Rear RJ45 Jack.



244-003

E-29

SuperSeal™ CAT 5e Transient Voltage Suppression Jam-Nut Receptacle with Accessory Threads and RJ45 Jack, Mating Interface to PC Tail or Solder Cup.



233-305

E-20

SuperSeal™ CAT 5e Quadrx Interface Receptacle Adapter with Accessory Threads and Rear RJ45 Jack.



244-004

E-30

SuperSeal™ CAT 5e Transient Voltage Suppression Wall Mount Receptacle with Accessory Threads and RJ45 Jack, Mating Interface to PC Tail or Solder Cup.



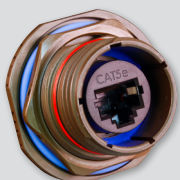
SERIES 23

SuperSeal™

Performance Hardened CAT 6A and CAT 5e

The SuperSeal family of ruggedized Cat 5e and 6A SuperNine connectors are IP68 rated in the mated condition for reliable environmental field use. SuperSeal connectors provide military grade protection and durability for operational use under harsh environmental conditions. SuperSeal connectors benefit from increased operating temperature range, longer life cycle and, significantly improved vibration and shock performance. CAT 5e and 6A RJ45 Ethernet is the standard data communication protocol for gathering, distribution and sharing of C4ISR information to and from command and field units within military, police fire and rescue organizations. SuperSeal provides key performance benefits including superior sealing, grounding, and wire termination for more flexible and reliable communications in rugged field applications.

- CAT 5e and CAT 6A versions available
- IP67 unmated—for complete system protection against water, sand and dust
- Highly durable SuperSeal™ insert design, provides enhanced operating temperature, increased life-cycle, and rugged vibration and shock performance
- Crimp, solder-cup, PC tail and cable assemblies



Jam-nut
Mount



Wall
Mount



Cable
Assemblies



RJ45 CAT 5E AND 6A ETHERNET MIL-DTL-38999 Series III Type Connectors

Performance Specifications



B

RJ45 CAT 5e Performance Specifications

Property	MIL-DTL-38999 Series III Type
----------	----------------------------------

Material and Finish

Shell/Coupling and Plating	Complete list of options available in the Material and Finish Options portion of this section
Contacts	PC tails, solder cup, and crimp contacts: copper alloy, gold plated
RJ45 Insulator	PPS
Grommet, Peripheral Seal, Interfacial Seal, O-ring	Blended fluorosilicone/silicone elastomer, 30% silicone per ZZ-R-765, 70% fluorosilicone per MIL-R-25988
Shell Sizes	17 and 19
Shielding Sleeve	Material: Copper alloy Finish: Nickel

Electrical Specifications

Data Rate	CAT 5e = 10 BASE-T, 100 BASE-TX, and 1000 BASE-T/1000 BASE-TX
Current Rating	Cat 5e, 1.5 Amps
D.W.V.	1000 VDC (700 VAC)
I.R.	500 Mega ohms @ 500 VDC
Frequency	100 MHz, Cat 5e
Wiring	Straight through, Cat 5e
Cabling Length	Up to 100 meters or 100 meters max.
Shield Continuity	Continuous through coupler or continuous coupler to shell

Environmental/Mechanical Performance

Sealing	IP68 mated condition, IP67 unmated condition
Outgassing	Mod Code 186S meets outgassing requirements per ASTM E 595 and meets NASA level 3 screening for standard reliability Mod Code 928 meets outgassing requirements per UL 94 V-0
Operating Temperature	-40°C to +120°C
Vibration	20g, 3 Axis, 10 - 2000Hz
Mechanical Shock	300 g's
Backshell Interface	MIL-DTL-38999, Designator H
Mating System	Triple-start stub ACME
Mating Cycles	500

RJ45 CAT 6A Performance Specifications

Property	MIL-DTL-38999 Series III Type
----------	----------------------------------

Material and Finish

Shell/Coupling and Plating	Complete list of options available in the Material and Finish Options portion of this section
Contacts	crimp contacts: copper alloy, gold plated
RJ45 Insulator	PPS
Grommet, Peripheral Seal, Interfacial Seal, O-ring	Blended fluorosilicone/silicone elastomer, 30% silicone per ZZ-R-765, 70% fluorosilicone per MIL-R-25988
Shell Sizes	17 and 19
Shielding Sleeve	Material: Copper alloy Finish: Nickel

Electrical Specifications

Data Rate	CAT 6A = 10G BASE-T
Current Rating	Cat 6A, 1.5 Amps
D.W.V.	1000 VDC (700 VAC)
I.R.	500 Mega ohms @ 500 VDC
Frequency	500 MHz, Cat 6A
Wiring	Straight through, Cat 6A
Cabling Length	Up to 100 meters.
Shield Continuity	Continuous through coupler or continuous coupler to shell

Environmental/Mechanical Performance

Sealing	IP68 mated condition IP67 unmated condition
Outgassing	Mod Code 186S meets outgassing requirements per ASTM E 595 and meets NASA level 3 screening for standard reliability Mod Code 928 meets outgassing requirements per UL 94 V-0
Operating Temperature	-40°C to +120°C
Vibration	20g, 3 Axis, 10 - 2000Hz
Mechanical Shock	300 g's
Backshell Interface	MIL-DTL-38999, Designator H
Mating System	Triple-start stub ACME
Mating Cycles	500



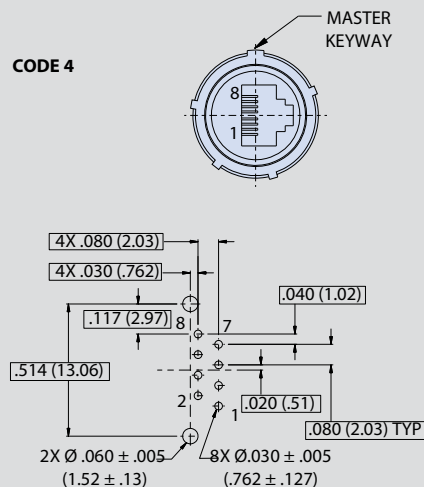
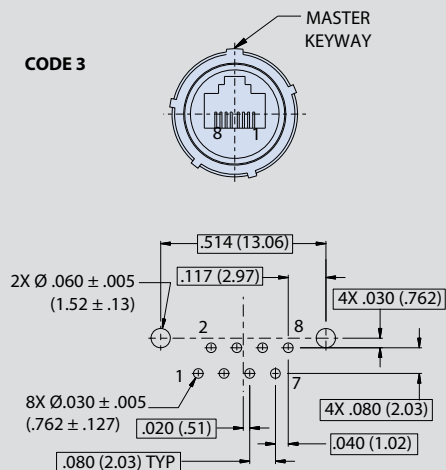
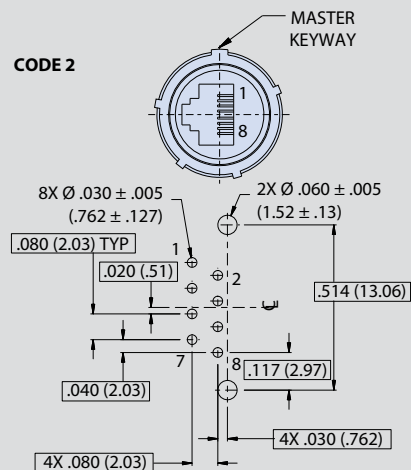
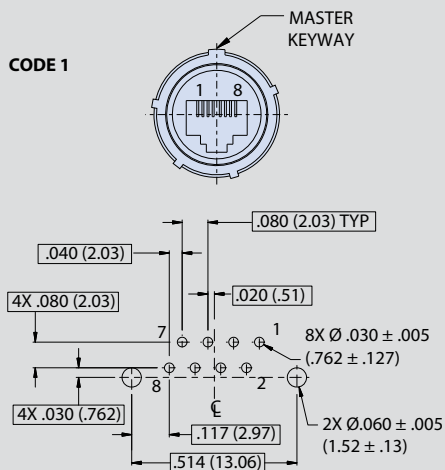
RJ45 CAT 5E ETHERNET

MIL-DTL-38999 Series III Type Connectors



RJ45 PCB Footprints, Jack Orientation Options

MIL-DTL-38999 TYPE, SUPERSEAL RJ45 PANEL CUTOUTS FOR SHELL SIZE 17 AND 19





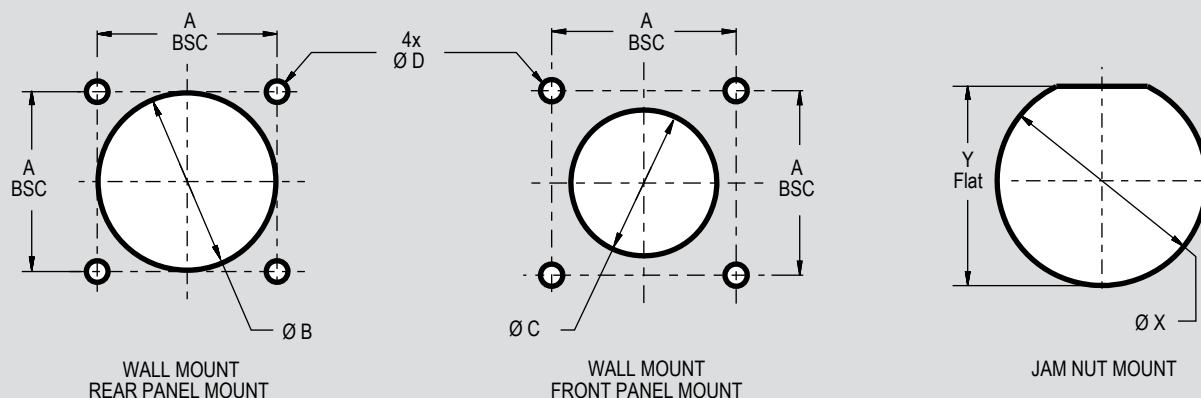
RJ45 CAT 5E ETHERNET

MIL-DTL-38999 Series III Type Connectors



Panel Cut-out Dimensions

MIL-DTL-38999 TYPE, SUPERSEAL RJ45 PANEL CUTOUTS FOR SHELL SIZE 17 AND 19



Panel Cut-Out Dimensions						
Shell Size	A Bsc	B Dia Min	C Dia Min	D Holes	X Dia	Y Flat
17	1.062 (26.97)	1.219 (30.96)	1.016 (25.81)	.133 (3.38)	1.270 (32.26)	1.210 (30.73)
				.123 (3.12)	1.260 (32.00)	1.208 (30.68)
19	1.156 (29.36)	1.297 (32.94)	1.141 (28.98)		1.395 (35.43)	1.335 (33.91)
					1.385 (35.18)	1.325 (33.66)



RJ45 CAT 5E/6A ETHERNET

MIL-DTL-38999 Series III Type Connectors



Modification Codes

ASTM E595 Outgassing

MOD CODE 186S

- SuperSeal® connectors specially processed to meet ASTM E595 outgassing requirements.
- Modification code specifies special outgassing bakeout processing.
- Meets NASA Screening Level 1 requirements

Space flight equipment requires low-outgassing components in order to prevent degradation to optics and other sensitive instruments. The space industry has adopted a standardized test procedure, ASTM E595, to evaluate outgassing properties. In the ASTM test, material samples are heated to 125° C at a vacuum of 5×10^{-5} torr for 24 hours. The test sample is then weighed to calculate the Total Mass Loss (TML), which may not exceed 1.0% of the total initial mass. A collector plate is used to determine the Collected Volatile Condensable Material (CVCM), which may not exceed 0.1% of the total original specimen mass. SuperSeal™ connectors contain nonmetallic materials such as rubber, plastic, adhesives and potting compounds which can give off gases when subjected to a vacuum or high heat. Unless the connector is specially processed, the TML and CVCM can exceed allowable limits. Glenair is able to offer a bakeout process, 48 hour oven bakeout at 257° F, which assures all materials comply with ASTM E595

UL 94 V-0 Flammability Standard

MOD CODE 928

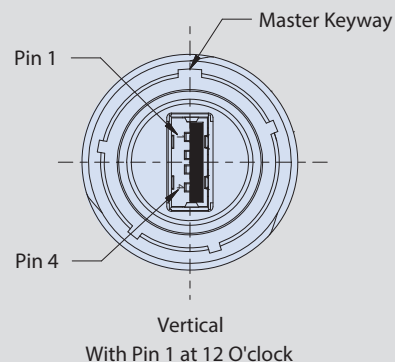
- SuperSeal® connectors specially processed to meet UL 94 V-0 flammability standard

UL 94, the Standard for Safety of Flammability of Plastic Materials for Parts in Devices and Appliances testing is a plastics flammability standard released by Underwriters Laboratories of the USA. The standard classifies plastics according to how they burn in various orientations and thicknesses. From lowest (least flame-retardant) to highest (most flame-retardant) V-0. Burning stops within 10 seconds on a vertical specimen; specimens may not drip flaming particles.

Flip Vertical USB Orientation by 180 degrees

MOD CODE 915

Flip standard, vertically oriented USB designs 180 degrees, allowing pin 1 to be located at the 12 O'clock position.



MIL-DTL-38999 Connector and Cable Assembly Material and Finish Codes

Code	Material	Finish	Finish Specification	Hrs. Salt Spray	Electrical Conductivity	Operating Temp. Range	RoHS Compliance
ME	Aluminum	Electroless Nickel	MIL-DTL-24308 Class K	96	Yes		Yes
MT	Aluminum	Nickel PTFE	SAE AMS2454	500	Yes	-65° to +175°C	Yes
NF	Aluminum	Cadmium, Olive Drab	SAE-AMS-QQ-P-416 Type II Class 2 over electroless nickel	500	Yes	-65 to +175°C	No
ZR	Aluminum	Zinc-Nickel, Black	ASTM B841 Grade 5 over electroless nickel	500	Yes	-65 to +175°C	Yes



SUPERSEAL RJ45 SuperNine MIL-DTL-38999 Series III Type 2330-0131 Connector Receptacle, RJ45 to Solder Cup Termination



Part Number Development								
Sample Part Number	2330-0131	NF	00	-	17	5	N	1
Series / Basic Part No.	Series 23 SuperNine CODE RED hermetic connector							
Material/Finish	ME = Aluminum, Electroless Nickel ZN = Aluminum, Zinc NI, Olive Drab NF = Aluminum, Cadmium O. D. ZR = Aluminum, Zinc NI, Black (Tri- Valent CR) MA = Aluminum, Electroless Nickel, Matte Finish AB = Marine Bronze, None (Clean Only)							
Connector Style	00 = Receptacle, wall mount, with slotted holes D0 = Receptacle, wall mount, with round holes 07 = Receptacle, jam nut							
Inline Shielded RJ45	G = Inline shielded and grounded to the shell - = Inline shielded RJ45							
Shell Size	17, 19							
RJ45 Category	5 = CAT 5e 6A = CAT 6A							
Alternate Polarization	A, B, C, D, E, N = Normal							
RJ45 Orientation Option	1, 2, 3, 4							



NOTES

- Material / Finish
 - Shell & Jam Nut: See Table I
 - O-Rings & Seals: Fluorosilicone
 - RJ45 Coupler Housing: UL94V-0 compliant polymer
 - Contacts: Copper alloy / gold plated
 - Sealing Compound: Polymer encapsulant
- Performances:
 - Leak Rate: 1 X 10⁻⁷ cc/s max helium, 1 ATM
 - Electrical: Current rating: 1.5 AMP
 - D.W.V.: 1000 VDC, 2 mA max
 - I.R.: 500 Mega ohms @ 500 VDC
 - Operating Temperature Range: -40°C to +120°C
- Glenair connectors are designed to mate with any QPL manufacturer's MIL-DTL-38999, Series III mating plug having the same shell size and polarization, opposite gender RJ45.
- Receptacle connector designed to meet IP68 unmated condition.
- Flange gaskets are not included with wall mounted receptacles. If required, select gasket from Glenair drawing 239-204.



SUPERSEAL RJ45

SuperNine MIL-DTL-38999 Series III Type



2330-0131 Connector Receptacle,
RJ45 to Solder Cup Termination

CODE RED

2330-0131-00 - WALL MOUNT RECEPTACLE WITH SLOTTED HOLES

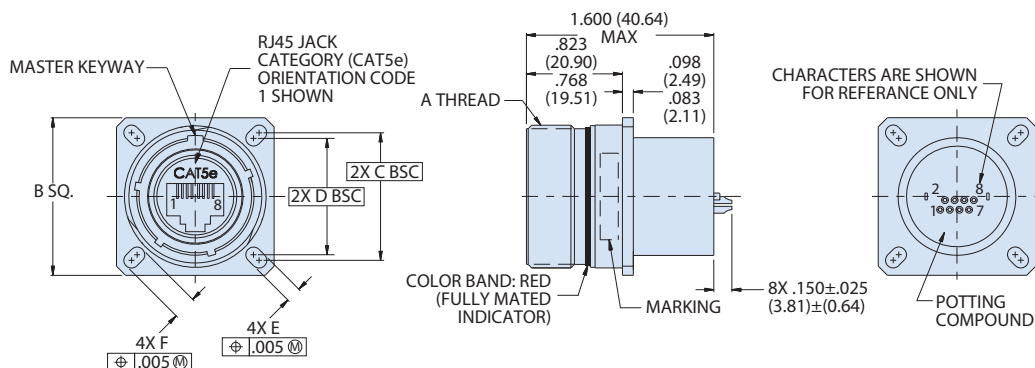
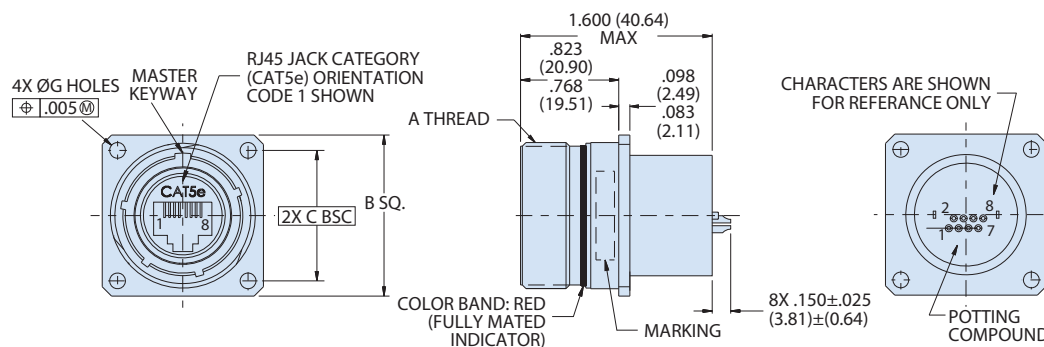


Table II Wall Mount							
Shell Size	A Thread	B SQ	C BSC	D BSC	E	F	ØG HOLES
17	1.1875-.1P-.3L-TS-2A	1.323 (33.60) 1.299 (32.99)	1.062 (26.97)	0.969 (24.61)	0.136 (3.45) 0.120 (3.05)	0.202 (5.13) 0.186 (4.72)	0.136 (3.45) 0.120 (3.05)
19	1.2500-.1P-.3L-TS-2A	1.449 (36.80) 1.425 (36.20)	1.156 (29.36)	1.062 (26.97)	0.136 (3.45) 0.120 (3.05)	0.202 (5.13) 0.186 (4.72)	0.136 (3.45) 0.120 (3.05)

2330-0131-D0 - WALL MOUNT RECEPTACLE WITH ROUND HOLES





SUPERSEAL RJ45

SuperNine MIL-DTL-38999 Series III Type

2330-0131 Connector Receptacle, RJ45 to Solder Cup Termination



2330-0131-07 - JAM NUT MOUNT RECEPTACLE

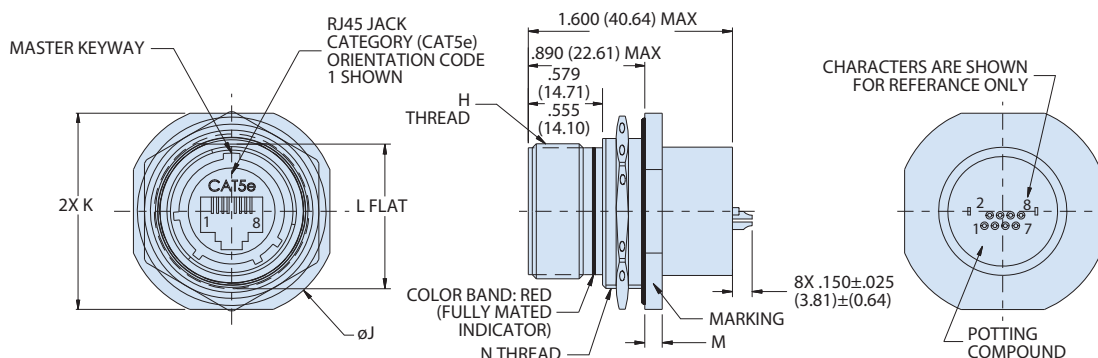


Table III Jam Nut Mount

Shell Size	A Thread	ØJ	K	L FLAT	M	N THREAD
17	1.1875-.1P-.3L-TS-2A	1.764 (44.81) 1.740 (44.20)	1.642 (41.71) 1.610 (40.89)	1.191 (30.25) 1.181 (30.00)	0.122 (3.10) 0.083 (2.11)	M32 X 1.0-6g 0.100R
19	1.2500-.1P-.3L-TS-2A	1.949 (49.50) 1.925 (48.90)	1.827 (46.41) 1.795 (45.59)	1.316 (33.43) 1.306 (33.17)	0.153 (3.89) 0.114 (2.90)	M35 X 1.0-6g 0.100R

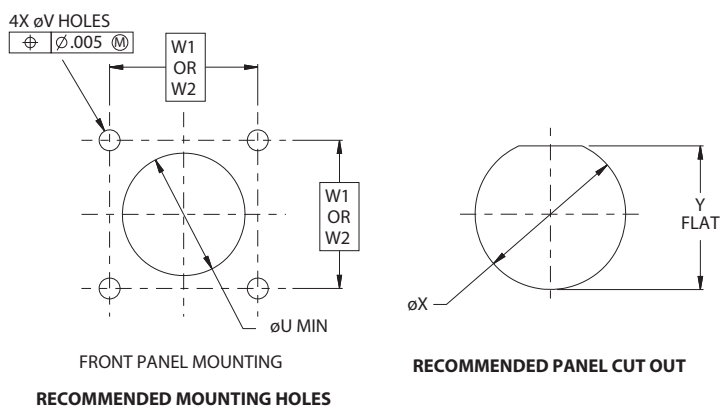
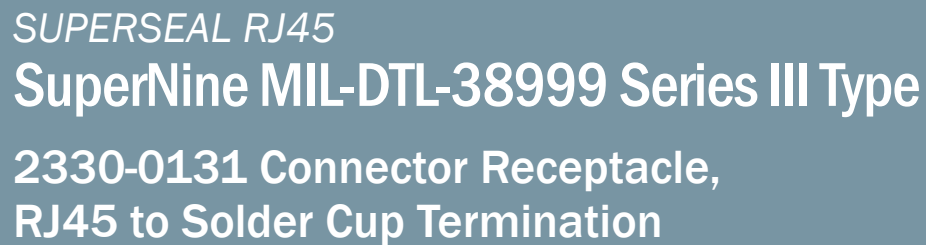


Table IV Panel Cutout and Wall Mount

Shell Size	ØU MIN	ØV HOLES	W1 BSC	W2 BSC	ØX	Y FLAT
17	1.016 (25.81)	0.133 (3.38) 0.123 (3.12)	1.062 (26.97)	0.969 (24.61)	1.270 (32.26) 1.260 (32.00)	1.210 (30.73) 1.200 (30.48)
19	1.141 (28.98)		1.156 (29.36)	1.062 (26.97)	1.395 (35.43) 1.385 (35.18)	1.335 (33.91) 1.325 (33.65)



A diagram of a master key cylinder. An arrow points to the top of the cylinder with the label "MASTER KEYWAY". Inside the cylinder, two pins are labeled "1" and "8", indicating the positions for the master key pins.

A diagram of a circular connector with 8 pins. The pins are arranged in a circular pattern, with the top pin labeled '1' and the bottom pin labeled '8'.

Figure 1 is a technical drawing of a shaft assembly. The shaft has a diameter of 8X ø.038 (0.97). The drawing shows various dimensions and tolerances for the shaft and its components. Keyway dimensions include .080 (2.03) TYP, .020 (0.51), .040 (1.02), and .017 (2.97). Keyway depths are .014 (3.06) and .011 (2.79). Keyway widths are .040 (1.02) and .030 (0.76). The shaft is shown with a key and a nut/bolt assembly.

A diagram of a circular gear with 8 teeth and a central shaft with 1 tooth. The gear is shown in a cross-section view, with the teeth labeled '8' and the central shaft labeled '1'.

A diagram of a circular connector with 8 pins and 1 ground pin. The pins are arranged in a circular pattern, with 8 pins on the left and 1 ground pin on the right. The diagram is labeled with '8' and '1'.

[illegible]

B-43

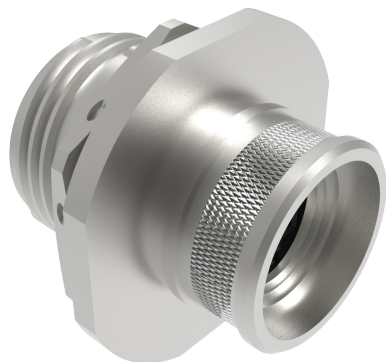


RJ45 CAT 5E/6A ETHERNET

MIL-DTL-38999 Series III Type Connectors



233-308 Coupler with integrated banding platform



Part Number Development							
Sample Part Number	233-308	NF	00	G	-17	5H	N 1
Basic Number	233-308						
Finish	See Material and Finish table						
Connector Style ¹	See Table V						
Insert-to-Shell Grounding	- = Inline shielded RJ45 G = Inline shielded and grounded to the shell ("G" option only with receptacle)						
Shell Size	17 or 19						
RJ45 Category	5H = CAT 5e 6A = CAT 6A (CAT 6A receptacle only, for use with 233-312)						
Alternate Key Position ¹	Per MIL-DTL-38999 A, B, C, D, E, N = Normal						
RJ45 Orientation	1, 2, 3, or 4						

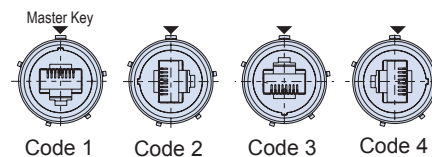
Material and Finish

M	Aluminum/Electroless Nickel
NF	Aluminum/Cadmium, Olive Drab, over Electroless Nickel (500 hour salt spray)
MT	Aluminum/Nickel PTFE
ME	Aluminum/Electroless Nickel (96 hour salt spray)
MA	Aluminum/ Electroless Nickel, Matte Finish (96 hour salt spray)
TZ	Aluminum/ Tin-Zinc, Green-Gold
ZN	Aluminum/ Zinc NI, Olive Drab
ZR	Aluminum/Black Zinc-Nickel (Tri-Valent Cr)
XM	Composite/Electroless Nickel
XMT	Composite/Nickel-PTFE
XO	Composite/No Finish
XW	Composite/Cadmium, Olive Drab, Over Electroless Nickel (500 Hour Salt Spray)
Z1	Stainless Steel/Passivate
ZL	Stainless Steel/ Electro-Deposited Nickel
ZW	Stainless Steel/Cad Olive Drab Over Nickel
AB	Marine Bronze/None (Clean Only)

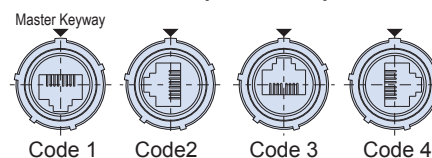
Connector Style

00	Wall mount receptacle with slotted holes ³
D0	Wall mount receptacle with round holes
CM	Wall mount receptacle with metric clinch nuts
CS	Wall Mount Receptacle with standard clinch nuts
07	rear panel mount, jam nut receptacle
05	Inline Receptacle
G6	Plug

RJ45 Orientation Options (Plug Face)



RJ45 Orientation Options (Receptacle Face)



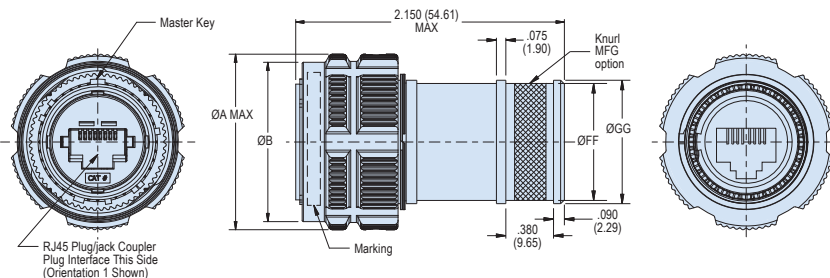
NOTES

- Interpret drawing per ASME Y14.5m - 2009.
- Material/finishes:
 - Shell, barrel, coupling nut, jam nut - see Table I (Composite coupling nut no plating required).
 - Insulators: High grade rigid dielectric/N.A.
 - Contacts: Copper alloy, gold plated
 - Seals: Silicone based elastomer
 - RJ45 coupler housing: UL94V-0 compliant ABS or PPS
 - Hardware: Stainless steel/passivated
- RJ45 jack/plug specifications:
 - RJ45 coupler maintains shield continuity
 - Wiring: straight through
 - Rohs compliant
 - Electrical: current rating: 1.5 Amp
 - D.W.V.: 1000 VDC, 2 MA MAX.
 - I.R.: 500 Mega ohms @ 500 VDC
 - Operating temperature range: -40°c to +120°c
- Receptacle connector designed to meet IP67 sealing unmated condition.

G6 - PLUG

G6 Plug Dimensions

Shell Size	Ø A Max		Ø B		Ø FF		Ø GG	
	in	mm	in	mm	in	mm	in	mm
17	1.406	35.71	1.276	32.41	.945	24.00	.990	25.15
19	1.516	38.51	1.382	35.10	1.050	26.67	1.100	27.94





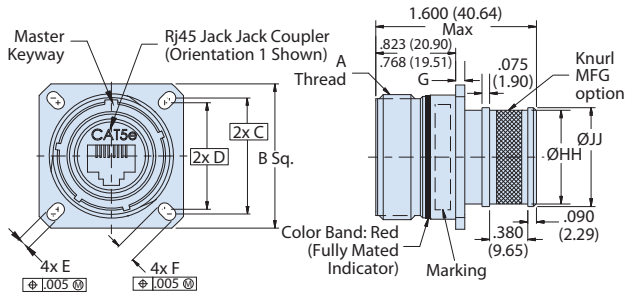
RJ45 CAT 5E/6A ETHERNET

MIL-DTL-38999 Series III Type Connectors

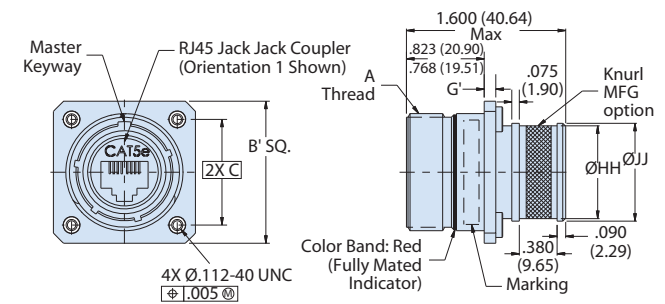


233-308 Coupler with integrated banding platform

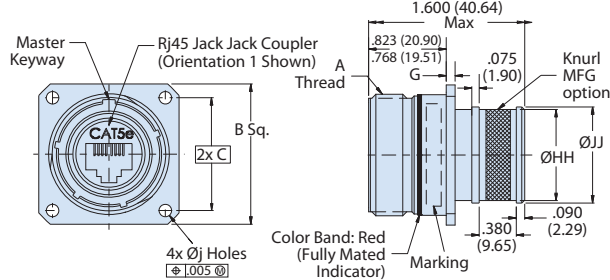
00 - WALL MOUNT RECEPTACLE WITH SLOTTED HOLES



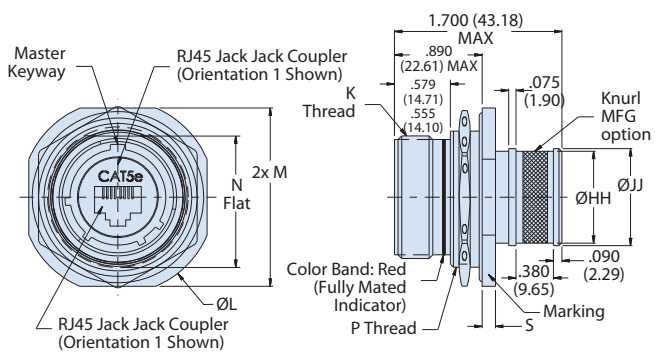
CS - WALL MOUNT RECEPTACLE WITH STANDARD CLINCH NUTS



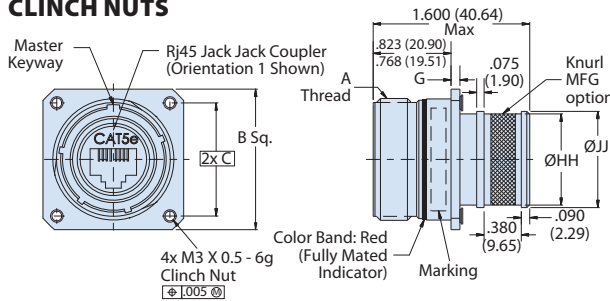
D0 - WALL MOUNT RECEPTACLE WITH ROUND HOLES



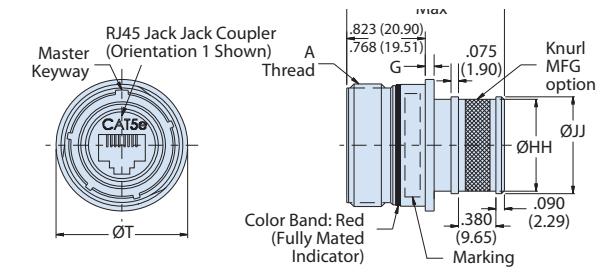
07 - JAM NUT MOUNT RECEPTACLE (SEE TABLE III)



CM - WALL MOUNT RECEPTACLE WITH METRIC CLINCH NUTS



05 - INLINE RECEPTACLE (SEE TABLE III)



Wall Mount Receptacle Dimensions												
Shell Size	A Thread	B SQ	B' SQ	C BSC	D BSC	E	F	G	G'	Ø HH	Ø JJ	Ø J Holes
17	1.1875-.1P-.3L-TS-2A	1.323 (33.60) 1.299 (32.99)	1.437 (36.50) 1.397 (35.48)	1.062 (26.97)	0.969 (24.61)	0.136 (3.45) 0.120 (3.05)	0.202 (5.13) 0.186 (4.72)	0.098 (2.49) 0.083 (2.11)	0.122 (3.08) 0.153 (3.89)	0.960 (24.38) 1.062 (26.97)	1.022 (25.96) 1.125 (28.58)	0.136 (3.45) 0.120 (3.05)
19	1.2500-.1P-.3L-TS-2A	1.449 (36.80) 1.425 (36.20)	1.531 (38.89) 1.491 (37.87)	1.156 (29.36)	1.062 (26.97)	0.136 (3.45) 0.120 (3.05)	0.202 (5.13) 0.186 (4.72)	0.098 (2.49) 0.083 (2.11)	0.122 (3.08) 0.153 (3.89)	0.960 (24.38) 1.062 (26.97)	1.022 (25.96) 1.125 (28.58)	0.136 (3.45) 0.120 (3.05)

Jam Nut Mount and Inline Receptacle Dimensions								
Shell Size	K Thread	Ø L	M	N Flat	P Thread	R Thread	S	Ø T Max
17	1.1875-.1P-.3L-TS-2A	1.764 (44.81) 1.740 (44.20)	1.642 (41.71) 1.610 (40.89)	1.191 (30.25) 1.181 (30.00)	M32 X 1.0-6g 0.100R	M25 X 1.0-6g 0.100R	0.122 (3.10) 0.083 (2.11)	1.406 (35.71)
19	1.2500-.1P-.3L-TS-2A	1.949 (49.50) 1.925 (48.90)	1.827 (46.41) 1.795 (45.59)	1.316 (33.43) 1.306 (33.17)	M35 X 1.0-6g 0.100R	M28 X 1.0-6g 0.100R	0.153 (3.89) 0.114 (2.90)	1.516 (38.51)

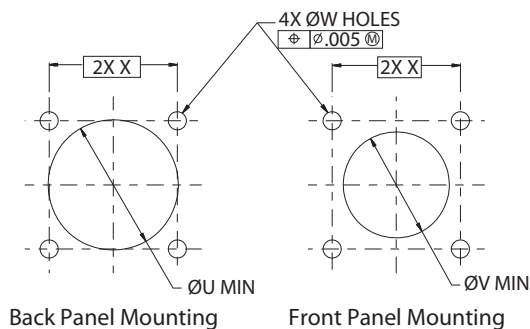


RJ45 CAT 5E/6A ETHERNET

MIL-DTL-38999 Series III Type Connectors

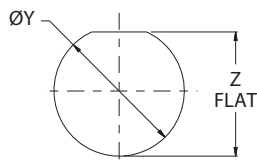


233-308 Coupler with integrated banding platform



Recommended Mounting Holes

Panel Thickness .228 Max (See Table IV)



Recommended Panel Cut Out

Panel Thickness .126-.062 (See Table IV)

PANEL CUTOUT & WALL MOUNT												
Shell	Ø U Min		Ø V Min		W Holes		X BSC		Ø Y		Z Flat	
Size	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm
17	1.219	30.96	1.016	25.81	0.133 0.123	3.38 3.12	1.062	26.97	1.270 1.260	32.26 32.00	1.210 1.200	30.73 30.48
19	1.297	32.94	1.141	28.98			1.156	29.36	1.395 1.385	35.43 35.18	1.335 1.325	33.91 33.65



RJ45 CAT 5E/6A ETHERNET

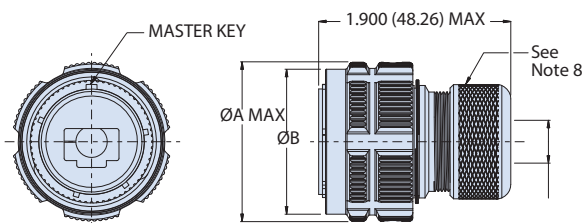
MIL-DTL-38999 Series III Type Connectors



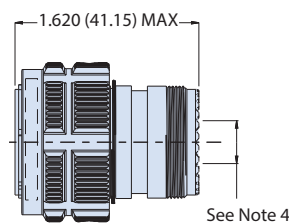
233-312 Plug with accessory threads

Part Number Development										
Sample Part Number	233-312	NF	G6	-	17	6A	N	1		
Series / Basic Part No.	233-312 = Cat 6A interface for D38999 type shell									
Material/Finish	NF = Aluminum/cadmium olive drag Contact factory for additional options MT = Aluminum/nickel PTFE ME = Aluminum/electroless nickel ZR = Aluminum/zinc-nickel									
Connector Style	G6 = Plug									
Plug Options	(-) = CAT 6A (28 AWG) A = CAT 6A (22-24 AWG)									
Shell Size	17 and 19									
RJ45 Category	6A = Cat 6A									
Alternate Polarization	A, B, C, D, E, N = Normal; Per MIL-DTL-38999									
RJ45 Orientation	1, 2, 3, 4									
Strain Relief Style	A = Accessory threads (accepts standard D38999 backshells) T = Shrink boot M = Over mold Omit for standard									
Cable OD	W = Large cable OD up to .400 (10.16) Omit for cable OD .187/.312 (4.75/7.92)									

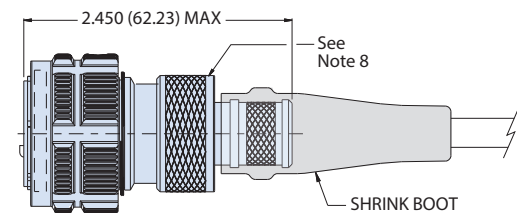
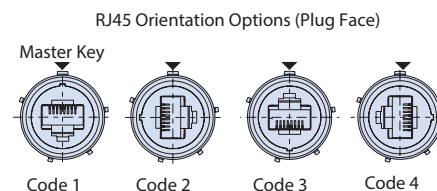
B



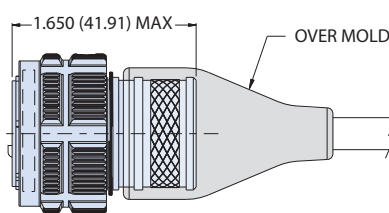
Strain Relief Style: Standard



Strain Relief Style: A - Accessory Threads



Strain Relief Style: T - Shrink Boot



STRAIN RELIEF STYLE: M - OVER MOLD

Dimensions		
Shell Size	ØA Max	ØB
17	1.406 (35.71)	1.276 (32.41) 1.268 (32.21)
19	1.516 (38.51)	1.382 (35.10) 1.374 (34.90)

NOTES

- Material/finish:
 - Barrel, coupling nut: see part number development. Composite coupling nut no plating required.
 - Insulators: high grade rigid dielectric/ N.A.
 - Seals: silicone based elastomer
 - Hardware: stainless steel/passivated
- RJ45 plug specifications:
 - RJ45 plug cable maintains shield continuity
 - RoHS compliant

- Electrical
- Current rating: 1 amp
 - D.W.V.: 1000V DC/min
 - I.R.: 500 Mega ohms minimum @ 1000V DC
 - Operating temperature range: -20°C to +85°C
- Meets IP68 in mated condition
 - Design accommodates cable outside diameter 0.187 (4.750) to 0.400 (10.16)
 - Design accommodates CAT 6A RJ45 modular plugs:
 - (-) = CAT 6A, 28 AWG
 - A = CAT 6A, 22-24 AWG

- See assembly instructions AI233-312 for cable termination and connector assembly. Assembly instructions to be kitted with each shipment
- CAT 6A modular plugs packaged loose for each plug connector.
- Recommended torque value for different cable outside diameter.

Cable OD (in)	.187/.225	.225/.275	.275/.312	.312/.400
Torque (in/lbs)	20.6	18.3	12.6	10



RJ45 CAT 5E/6A ETHERNET

MIL-DTL-38999 Series III Type Connectors



233-300 Coupler with accessory threads



**Plug
Front View**



**Receptacle
Front View**



**Receptacle
Rear View**

Material and Finish¹

NF	Aluminum/Cadmium, Olive Drab
ME	Aluminum/Electroless Nickel
MT	Aluminum/Nickel PTFE
ZR	Aluminum/Black Zinc-Nickel

NOTES

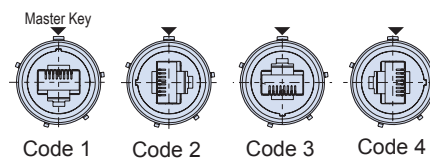
1. See Section A for alternate key/keyway positions and panel cutout dimensions
2. G option is inline shielded and grounded to shell, available for receptacle only
3. Front panel mount only
4. Meets IP67 in unmated condition, IP68 mated
5. For shrink boot see part number 770-028
6. Receptacle has RJ45 jack. Plug has RJ45 plug to jack

Part Number Development									
Sample Part Number	233-300	NF	00	G	17	5H	N	1	T
Basic Number	233-300								
Finish	See Material and Finish table								
Connector Style¹	See Connector Style table								
Insert-to-Shell Grounding	– = Inline shielded RJ45 insert G = Shielded and grounded to shell ²								
Shell Size	17 or 19								
RJ45 Category	5H = CAT 5e 6A = CAT 6A (CAT 6A receptacle only, for use with 233-312)								
Alternate Key Position¹	Per MIL-DTL-38999 A, B, C, D, E, N = Normal								
RJ45 Orientation	1, 2, 3, or 4								
Shrink Boot	T = Part No. 770-028; see accessory section. (Omit for None)								

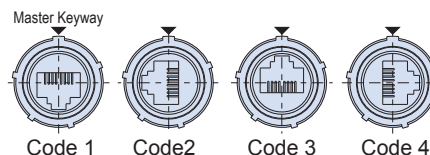
Connector Style¹

00	Wall mount receptacle with slotted holes ³
01	Wall mount receptacle with slotted holes and metal cable gland
05	Inline Receptacle
07	rear panel mount, jam nut receptacle
08	In-line receptacle with metal cable gland
D0	Wall mount receptacle with round holes
D1	Wall mount receptacle with round holes and metal gland
CM	Wall mount receptacle with metric clinch nuts
CG	Wall mount receptacle with metric clinch nuts and metal gland
CS	Wall Mount Receptacle with standard clinch nuts
G6	plug
G9	Plug with metal cable gland ⁵

RJ45 Orientation Options (Plug Face)



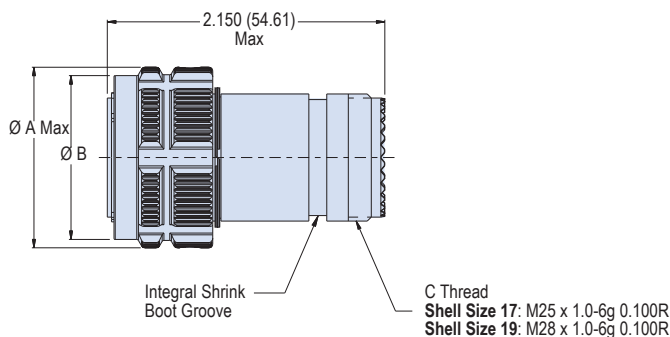
RJ45 Orientation Options (Receptacle Face)



All external dimensions, features, etc. compliant with D38999/20, /24, &/26. Consult factory for additional information.

G6 - PLUG WITH INTEGRAL SHRINK BOOT

G6 and G7 - plug Dimensions				
Shell Size	A Dia Max		B Dia	
	in	mm	in	mm
17	1.406	35.71	1.276 1.268	32.41 32.21
19	1.516	38.51	1.382 1.374	35.10 34.90





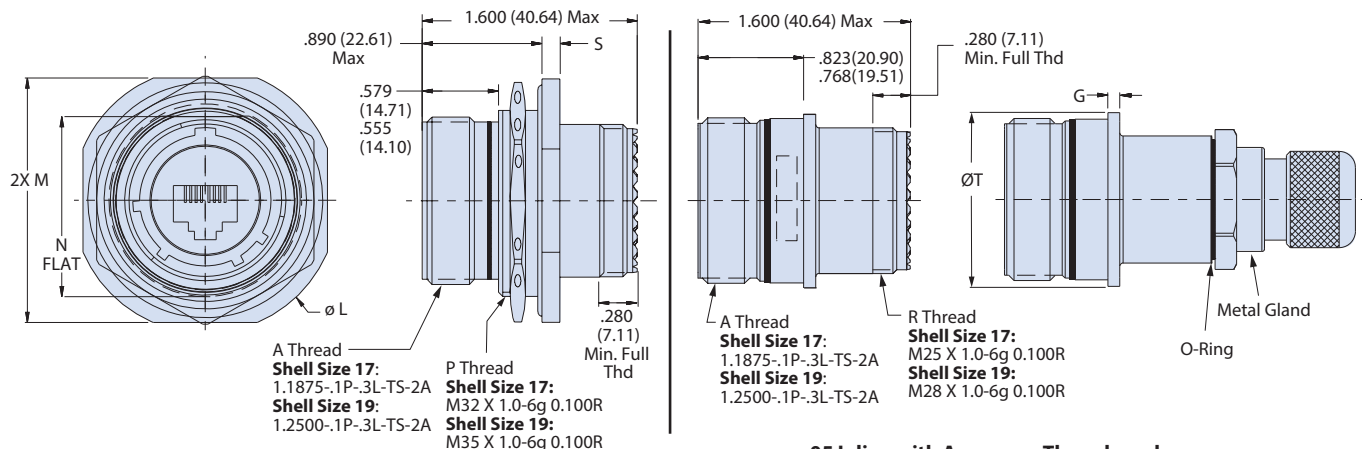
RJ45 CAT 5E/6A ETHERNET

MIL-DTL-38999 Series III Type Connectors



233-300 Coupler with accessory threads

07 - REAR PANEL MOUNT JAM NUT AND 05 OR 08 - INLINE RECEPTACLES

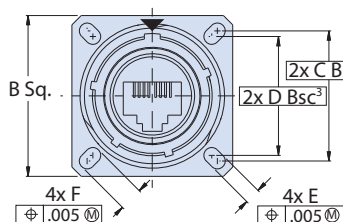


07 Jam Nut Receptacle (mating face and side view)

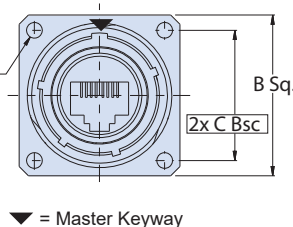
05 Inline with Accessory Threads and
08 Inline with Metal Gland (side view only)

00, 01, D0, D1, CM AND CG - WALL MOUNT RECEPTACLES WITH ACCESSORY THREADS OR METAL GLAND

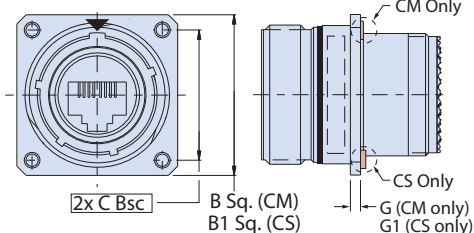
00, 01 - Wall Mount Receptacle
with Slotted Holes (Mating Face)



D0, D1 - Wall Mount Receptacle
with Round Holes (Mating Face)

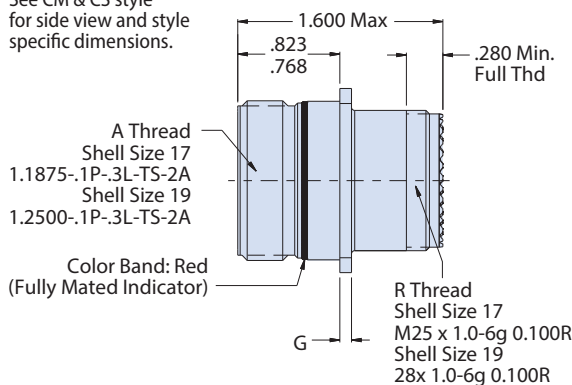


CM Metric and CS Standard - Wall Mount Receptacles
(Mating Face and Side View)

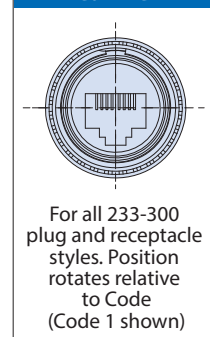


Note:
See CM & CS style
for side view and style
specific dimensions.

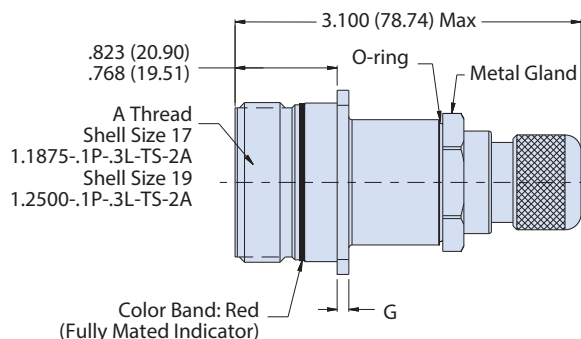
00, D0, CM - Wall Mount Receptacle



Rear View



01, D1, CG - Wall Mount Receptacle with Metal Gland



Jam Nut and Inline Receptacle Dimensions					
Shell Size	ØL	M	N	S	ØT Max
17	1.764 (44.81)	1.642 (41.71)	1.191 (30.25)	.122 (3.09)	1.275 (32.39)
	1.740 (44.20)	1.610 (40.89)	1.181 (30.00)	.083 (2.11)	
19	1.949 (49.50)	1.827 (46.41)	1.316 (33.43)	.153 (3.89)	1.337 (33.96)
	1.925 (48.90)	1.795 (45.59)	1.306 (33.17)	.114 (2.90)	

Wall Mount Receptacle Dimensions									
Shell Size	B Sq	B1 Sq	C Bsc	D Bsc ³	E	F	G	G1	ØJ Holes
17	1.323 (33.60)	1.437 (34.50)	1.062 (26.97)	.969 (24.61)	.136 (3.45)	.202 (5.13)	.098 (2.49)	.122 (3.10)	.136 (3.45)
	1.299 (32.99)	1.397 (35.48)						.083 (.58)	
19	1.449 (36.80)	1.531 (38.89)	1.156 (29.36)	1.062 (26.97)	.120 (3.05)	.186 (4.72)	.083 (2.11)	.153 (3.89)	.120 (3.05)
	1.425 (36.20)	1.491 (37.87)						.144 (3.66)	



RJ45 CAT 5E ETHERNET

MIL-DTL-38999 Series III Type Connectors



233-301 Plug and Receptacles with crimp removable contacts and accessory threads



Receptacle front View



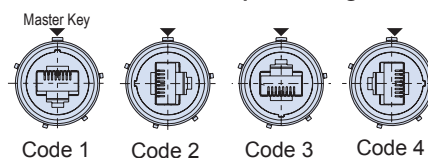
Receptacle rear View

Part Number Development									
Sample Part Number	233-301	NF	00	G	17	5H	N	1	T
Basic Number	233-301								
Finish	See Material and Finish table								
Connector Style	See Connector Style table								
Insert-to-Shell Grounding	- = Inline shielded RJ45 insert G = Shielded and grounded to shell ²								
Shell Size	17 or 19								
RJ45 Category	5H = CAT 5e For Cat 6A applications consult factory								
Alternate Key Position ¹	Per MIL-DTL-38999 A, B, C, D, E, N = Normal								
RJ45 Orientation	1, 2, 3, or 4								
Shrink Boot	T = Part No. 770-028 (Omit for None)								

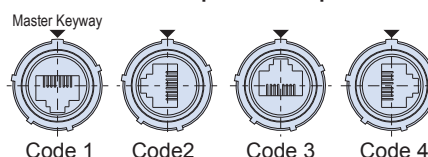
Connector Style ¹	
00	Wall mount receptacle with slotted holes
05	Inline Receptacle
07	rear panel mount, jam nut receptacle
D0	Wall mount receptacle with round holes
CM	Wall mount receptacle with metric clinch nuts
CS	Wall mount receptacle with metric clinch nuts
G6	plug

Material and Finish	
NF	Aluminum/Cadmium, Olive Drab
ME	Aluminum/Electroless Nickel
MT	Aluminum/Nickel PTFE
ZR	Aluminum/Black Zinc-Nickel

RJ45 Orientation Options (Plug Face)



RJ45 Orientation Options (Receptacle Face)



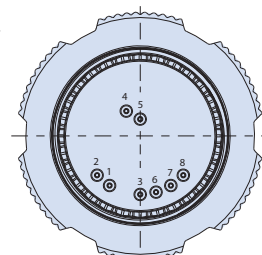
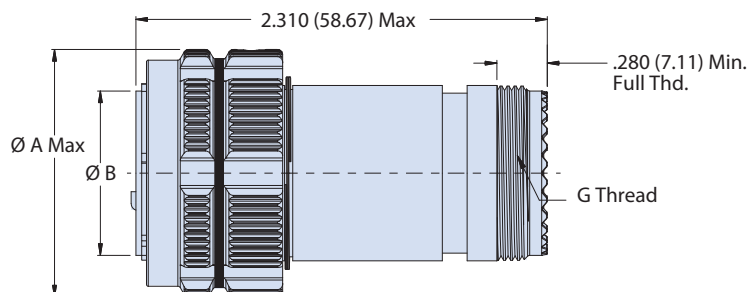
NOTES

- See Section A for alternate key/keyway positions and panel cutout dimensions
- G option is inline shielded and grounded to shell, available for receptacle only
- Front panel mount only
- Crimp removable size 22 pin contacts (M39029/58-360) supplied loose
- Meets IP67 in unmated condition and IP68 mated condition
- For shrink boot see part number 770-028
- Receptacle connector has RJ45 jack

All external dimensions, features, etc. compliant with D38999/20, /24, &/26. Consult factory for additional information.

G6 PLUG WITH ACCESSORY THREADS

Plug Dimensions				
Shell Size	A Dia Max		B Dia	
	in	mm	in	mm
17	1.406	35.71	.928 .922	23.57 23.42
19	1.516	38.51	1.033 1.027	26.24 26.09





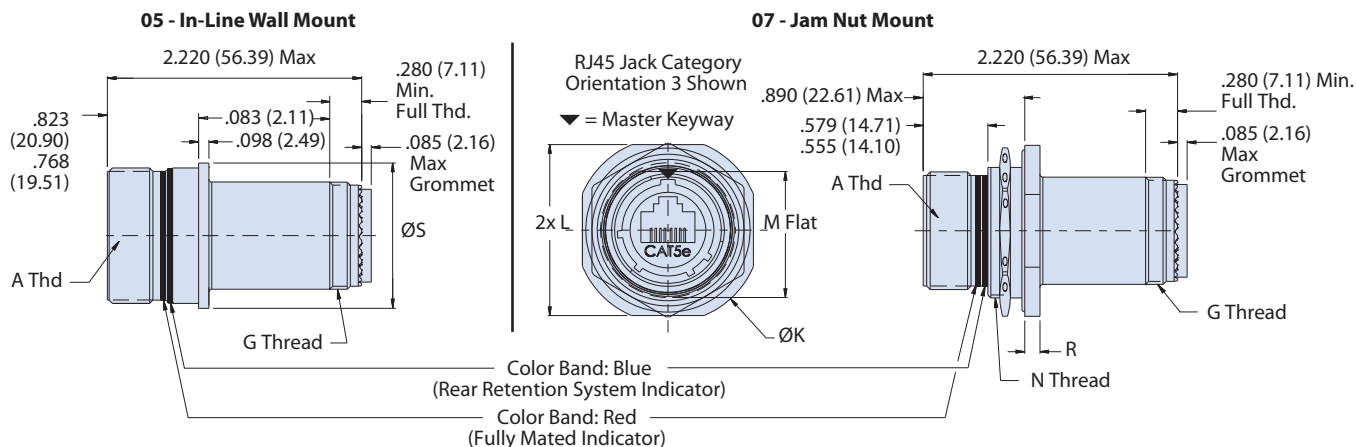
RJ45 CAT 5E ETHERNET

MIL-DTL-38999 Series III Type Connectors



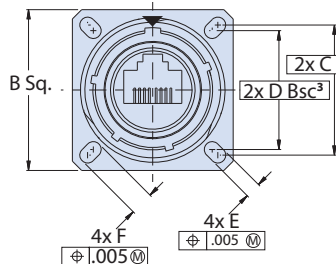
233-301 Plug and Receptacles with crimp removable contacts and accessory threads

05 - INLINE AND 07 - REAR PANEL MOUNT, JAM NUT RECEPTACLE WITH ACCESSORY THREADS

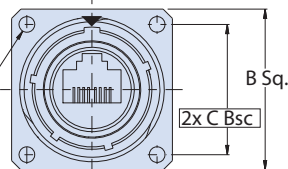


00, D0 AND CM - WALL MOUNT RECEPTACLES WITH ACCESSORY THREADS

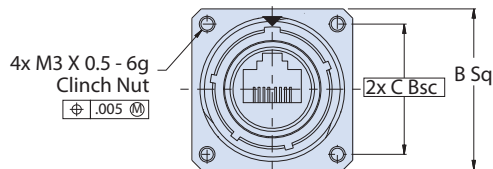
00 - Wall Mount Receptacle with Slotted Holes (Mating Face)



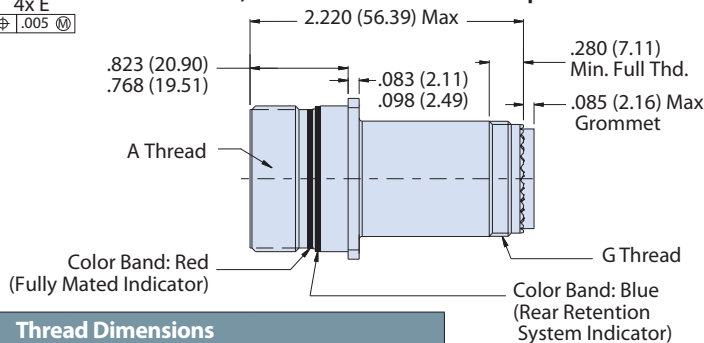
D0 - Wall Mount Receptacle with Round Holes (Mating Face)



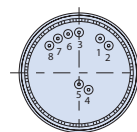
CM - Wall Mount Receptacle with Metric Clinch Nuts (Mating Face)



00, D0 and CM - Wall Mount Receptacle



Rear View



For all 233-301 receptacle styles position rotates relative to code. (Code 3 shown)

Thread Dimensions

Shell Size	A Thread	G Thread	N Thread
17	1.1875-.1P-.3L-TS-2A	M25 x 1.0-6g 0.100R	M32 x 1.0-6g 0.100R
19	1.2500-.1P-.3L-TS-2A	M28 x 1.0-6g 0.100R	M35 x 1.0-6g 0.100R

In-line and Jam Nut Receptacle Dimensions

Shell Size	ØK	L	M	R	ØS
17	1.764 (44.81)	1.642 (41.71)	1.191 ()	.122 (3.09)	1.275
	1.740 (44.20)	1.610 (40.89)	1.181 ()	.083 (2.11)	(32.39)
19	1.949 (49.50)	1.827 (46.51)	1.316 ()	.153 (3.89)	1.337
	1.925 (48.90)	1.795 (45.59)	1.305 ()	.114 (2.90)	(33.96)

Wall Mount Receptacle Dimensions

Shell Size	B Sq	C Bsc	D Bsc³	E	F	Ø H Holes
17	1.323 (33.60)	1.062	.969	.136	.202	.136
	1.299 (32.99)	(26.97)	(24.61)	(3.45)	(5.13)	(3.45)
19	1.449 (36.80)	1.156	1.062	.120	.186	.120
	1.425 (36.20)	(29.36)	(26.97)	(3.05)	(4.72)	(3.05)



RJ45 CAT 5E ETHERNET

MIL-DTL-38999 Series III Type Connectors



233-314 Plug and Receptacles with crimp removable contacts and integrated banding porch

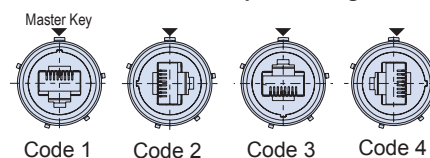
B

Part Number Development									
Sample Part Number	233-314	NF	00	G	17	5H	N	1	T
Basic Number	233-314								
Finish	See Material and Finish table								
Connector Style	See Connector Style table								
Insert-to-Shell Grounding	- = Inline shielded RJ45 insert G = Shielded and grounded to shell ²								
Shell Size	17 or 19								
RJ45 Category	5H = CAT 5e, high-temp. For Cat 6A applications consult factory								
Alternate Key Position ¹	Per MIL-DTL-38999 A, B, C, D, E, N = Normal								
RJ45 Orientation	1, 2, 3, or 4								
Shrink Boot	T = Part No. 770-028 (Omit for None)								

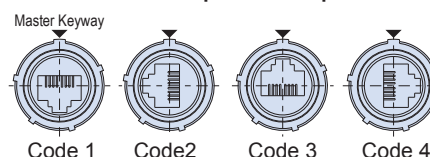
Connector Style ¹	
00	Wall mount receptacle with slotted holes
05	Inline Receptacle
07	rear panel mount, jam nut receptacle
D0	Wall mount receptacle with round holes
CM	Wall mount receptacle with metric clinch nuts
G6	plug

Material and Finish	
NF	Aluminum/Cadmium, Olive Drab
ME	Aluminum/Electroless Nickel
MT	Aluminum/Nickel PTFE
ZR	Aluminum/Black Zinc-Nickel

RJ45 Orientation Options (Plug Face)



RJ45 Orientation Options (Receptacle Face)



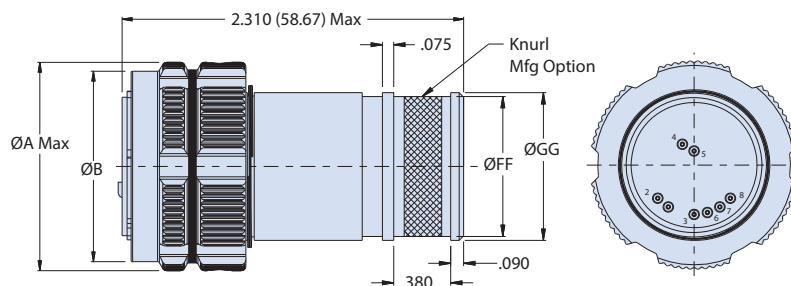
NOTES

- See Section A for alternate key/keyway positions and panel cutout dimensions
- G option is inline shielded and grounded to shell, available for receptacle only
- Front panel mount only
- Crimp removable size 22 pin contacts (M39029/58-360) supplied loose
- Meets IP67 in unmated condition and IP68 mated condition
- For shrink boot see part number 770-028
- Receptacle connector has RJ45 jack

All external dimensions, features, etc. compliant with D38999/20, /24, &/26. Consult factory for additional information.

G6 PLUG WITH BANDING PORCH

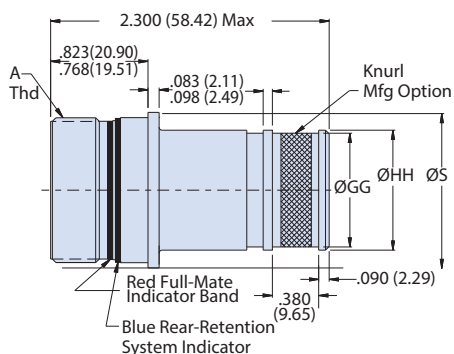
Plug Dimensions								
Shell Size	A Dia Max		B Dia		FF Dia		GG Dia	
	in	mm	in	mm	in	mm	in	mm
17	1.406	35.71	1.276	32.41	.945	24.00	.990	25.15
			1.268	32.21				
19	1.516	38.51	1.382	35.10	1.050	26.67	1.100	27.94
			1.374	34.90				



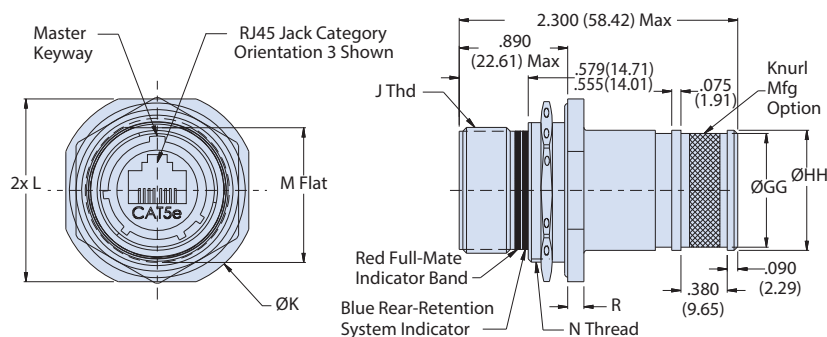
233-314 Plug and Receptacles with crimp removable contacts and integrated banding porch

05 - INLINE AND 07 - REAR PANEL MOUNT, JAM NUT RECEPTACLE WITH BANDING PORCH

05 - In-Line Wall-Mount

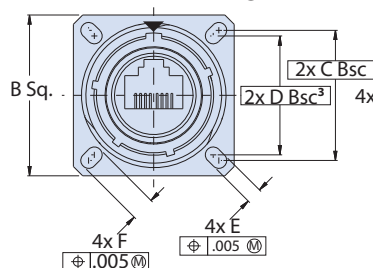


07 - Jam-Nut Mount

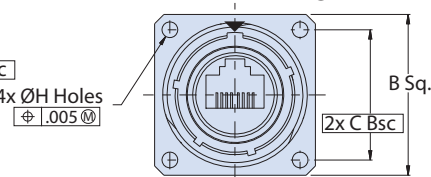


00, D0 AND CM - WALL MOUNT RECEPTACLES WITH ACCESSORY THREADS

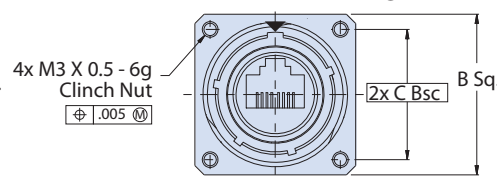
00 - Wall Mount Receptacle with Slotted Holes (Mating Face)



D0 - Wall Mount Receptacle with Round Holes (Mating Face)

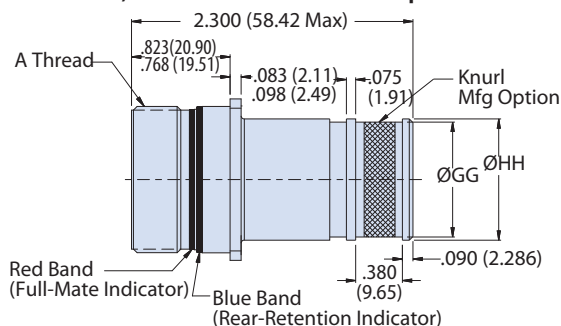


**CM - Wall Mount Receptacle
with Metric Clinch Nuts (Mating Face)**

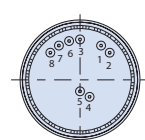


▼ = Master Keyway

00, D0 and CM - Wall Mount Receptacle



Rear View



For all 233-314
receptacle styles
position rotates
relative to code.
(Code 3 shown)

Wall Mount Receptacle Dimensions

Shell Size	B Sq	C Bsc	D Bsc ³	E	F	ØGG	ØHH	Ø H Holes
17	1.323 (33.60)	1.062	.969	.136 (3.45)	.202 (5.13)	.960 (24.38)	1.022 (25.96)	.136 (3.45)
	1.299 (32.99)	(26.97)	(24.61)					
19	1.449 (36.80)	1.156	1.062	.120 (3.05)	.186 (4.72)	1.062 (26.97)	1.125 (28.58)	.120 (3.05)
	1.425 (36.20)	(29.36)	(26.97)					

In-line and Jam Nut Receptacle Dimensions

Shell Size	ØK	L	M Flat	R	ØS Max
17	1.764 (44.81)	1.642 (41.71)	1.191 (30.25)	.122 (3.09)	1.406 (35.71)
	1.740 (44.20)	1.610 (40.89)	1.181 (30.00)	.083 (2.11)	
19	1.949 (49.50)	1.827 (46.51)	1.316 (33.43)	.153 (3.89)	1.516 (38.51)
	1.925 (48.90)	1.795 (45.59)	1.305 (33.15)	.114 (2.90)	

Thread Dimensions

Shell Size	A and J Threads	N Thread
17	1.1875-.1P-.3L-TS-2A	M32 x 1.0-6g 0.100R
19	1.2500-.1P-.3L-TS-2A	M35 x 1.0-6a 0.100R



RJ45 CAT 5E/6A ETHERNET

MIL-DTL-38999 Series III Type Connectors



233-302 Receptacle with PC tails



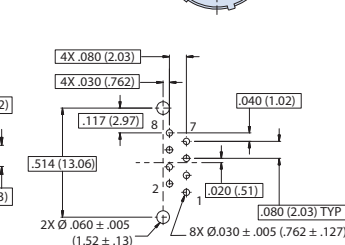
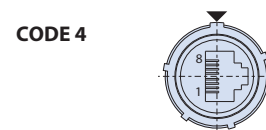
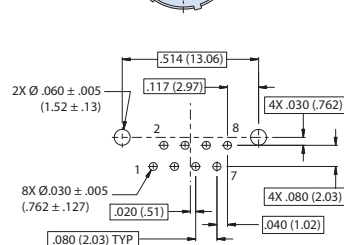
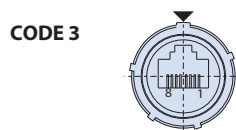
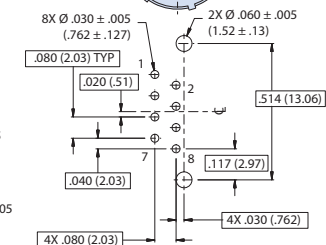
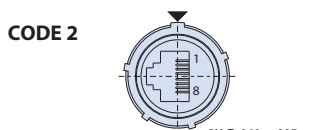
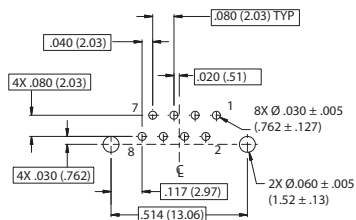
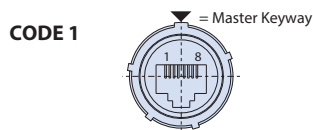
Receptacle front View



Receptacle rear View

Part Number Development								
Sample Part Number	233-302	NF	00	G	17	5H	N	1
Basic Number	233-302							
Finish	See Material and Finish table							
Connector Style ¹	See Connector Style table							
Insert-to-Shell Grounding	– = Inline shielded RJ45 insert G = Shielded and grounded to shell ²							
Shell Size	17 or 19							
RJ45 Category	5H = CAT 5e For Cat 6A applications consult factory							
Alternate Key Position ¹	Per MIL-DTL-38999 A, B, C, D, E, N = Normal							
RJ45 Orientation	1, 2, 3, or 4							

RJ45 ORIENTATION OPTIONS AND PCB LAYOUT



Connector Style ¹	
00	Wall mount receptacle with slotted holes
07	rear panel mount, jam nut receptacle
D0	Wall mount receptacle with round holes
CM	Wall mount receptacle with metric clinch nuts

Material and Finish	
NF	Aluminum/Cadmium, Olive Drab
ME	Aluminum/Electroless Nickel
MT	Aluminum/Nickel PTFE
ZR	Aluminum/Black Zinc-Nickel

Jam Nut Dimensions								
Shell Size	Dia K		L		M Flat		P	
	in	mm	in	mm	in	mm	in	mm
17	1.764	44.81	1.642	41.71	1.191	30.25	.090	2.29
	1.740	44.20	1.610	40.89	1.181	30.00	.080	2.03
19	1.949	49.50	1.827	46.41	1.316	33.43	.150	3.81
	1.925	48.90	1.795	45.59	1.306	33.17	.140	3.56

Wall Mount Receptacle Dimensions														
Shell Size	B Sq		C BSC		D BSC ³		E		F		G1		Ø H Holes	
	In	mm	In	mm	In	mm	In	mm	In	mm	In	mm	In	mm
17	1.323	33.60	1.062	26.97	.969	24.61	.136	3.45	.202	5.13	.122	3.10	0.136	3.45
	1.299	32.99					.120	3.05			.186	4.72		
19	1.449	36.80	1.156	29.36	1.062	26.97					.153	3.89	0.120	3.05
	1.425	36.20									.114	2.90		

NOTES

- See Section A for alternate key/keyway positions and panel cutout dimensions
- G option is inline shielded and grounded to shell, available for receptacle only
- Front panel mount only
- Meets IP67 in unmated condition, IP68 mated
- Receptacle connector has RJ45 jack



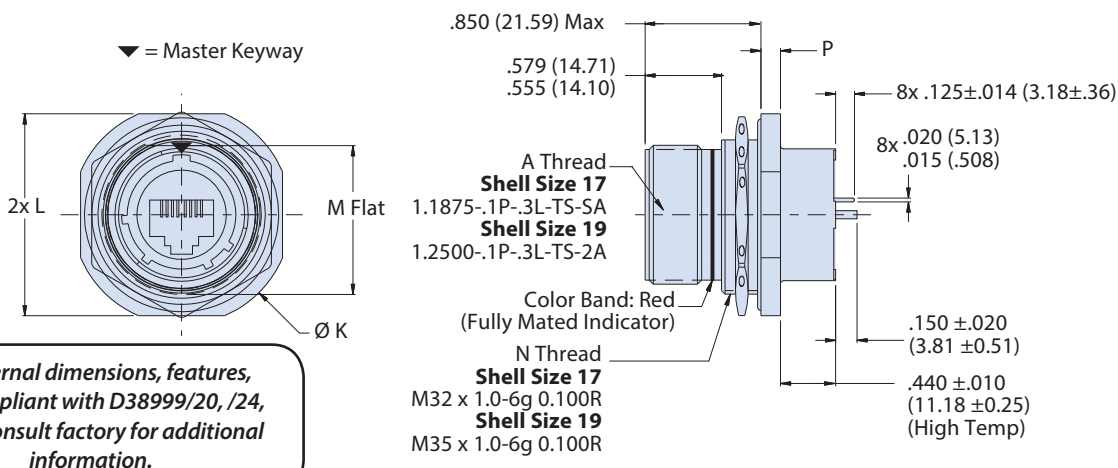
RJ45 CAT 5E/6A ETHERNET

MIL-DTL-38999 Series III Type Connectors



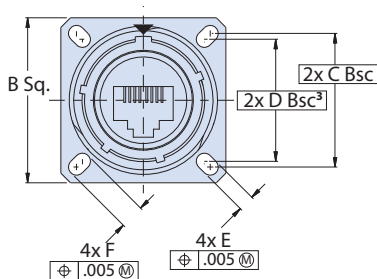
233-302 Receptacle with PC tails

07 - REAR PANEL MOUNT, JAM NUT RECEPTACLE

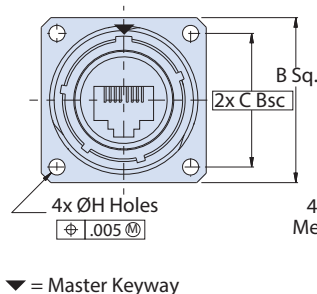


00, D0 AND CM - WALL MOUNT RECEPTACLES

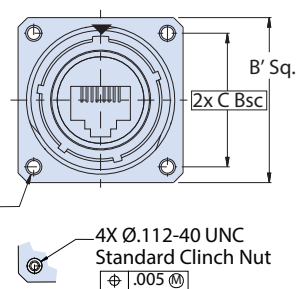
00 - Wall Mount Receptacle with Slotted Holes (Mating Face)



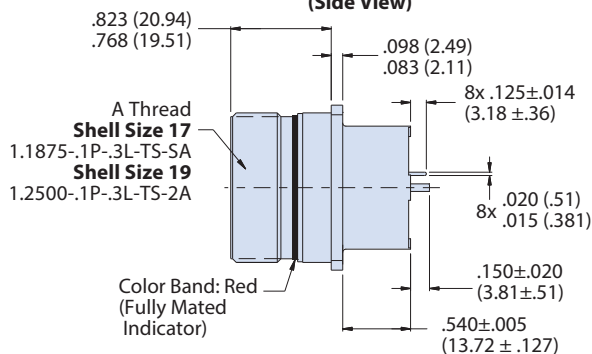
D0 - Wall Mount Receptacle with Round Holes (Mating Face)



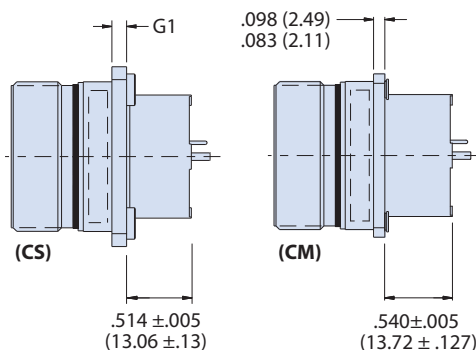
CM & CS - Wall Mount Receptacle with Metric/Std Clinch Nuts (Mating Face)



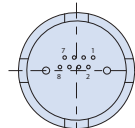
00 and D0 - Wall Mount Receptacle (Side View)



CS and CM - Wall Mount Receptacle (Side View)



Rear View



For all 233-302 receptacle styles position rotates relative to code (Code 1 shown)



RJ45 CAT 5E/6A ETHERNET

MIL-DTL-38999 Series III Type Connectors



233-303 Receptacle with solder cups

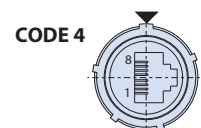
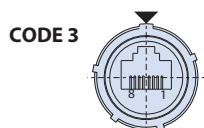
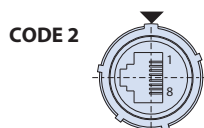
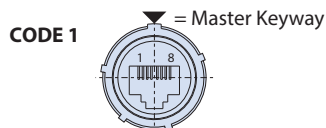


Receptacle front View

Receptacle rear View

Part Number Development								
Sample Part Number	233-303	NF	00	G	17	5H	N	1
Basic Number	233-303							
Finish	See Material and Finish table							
Connector Style ¹	See Connector Style table							
Insert-to-Shell Grounding	– = Inline shielded RJ45 insert G = Shielded and grounded to shell ²							
Shell Size	17 or 19							
RJ45 Category	5H = CAT 5e For Cat 6A applications consult factory							
Alternate Key Position ¹	Per MIL-DTL-38999 A, B, C, D, E, N = Normal							
RJ45 Orientation	1, 2, 3, or 4							

RJ45 ORIENTATION OPTIONS



Jam Nut Dimensions								
Shell Size	Ø J		K		L Flat		M	
	in	mm	in	mm	in	mm	in	mm
17	1.764	44.81	1.642	41.71	1.191	30.25	.122	3.10
	1.740	44.20	1.610	40.89	1.181	30.00	.083	2.11
19	1.949	49.50	1.827	46.41	1.316	33.43	.153	3.89
	1.925	48.90	1.795	45.59	1.306	33.17	.114	2.90

Material and Finish	
NF	Aluminum/Cadmium Olive Drab
ME	Aluminum/Electroless Nickel
MT	Aluminum/Nickel PTFE
ZR	Aluminum/Black Zinc-Nickel

Connector Style	
00	Wall mount receptacle with slotted holes
07	rear panel mount, jam nut receptacle
D0	Wall mount receptacle with round holes
CM	Wall mount receptacle with metric clinch nuts

Wall Mount Receptacle Dimensions												
Shell Size	B Sq		C Bsc		D Bsc		E		F		Ø G Holes	
	In	mm	In	mm	In	mm	In	mm	In	mm	In	mm
17	1.323	33.60	1.062	26.97	.969	24.61	.136	3.45	.202	5.13	0.136	3.45
	1.299	32.99										
19	1.449	36.80	1.156	29.36	1.062	26.97	.120	3.05	.186	4.72	0.120	3.05
	1.425	36.20										

NOTES

- See Section A for alternate key/keyway positions and panel cutout dimensions
- G option is inline shielded and grounded to shell, available for receptacle only
- Front panel mount only
- Meets IP67 in unmated condition, IP68 mated
- Receptacle connector has RJ45 jack
- Materials and finishes
 - Shell, jam nut: Al alloy/optional
 - Seals: Silicone based elastomer
 - RJ45 coupler housing: UL94V-0 compliant ABS or PPS
 - Contacts: Copper alloy, gold plated
 - Hardware: Stainless steel/passivated

All external dimensions, features, etc. compliant with D38999/20, /24, &/26. Consult factory for additional information.



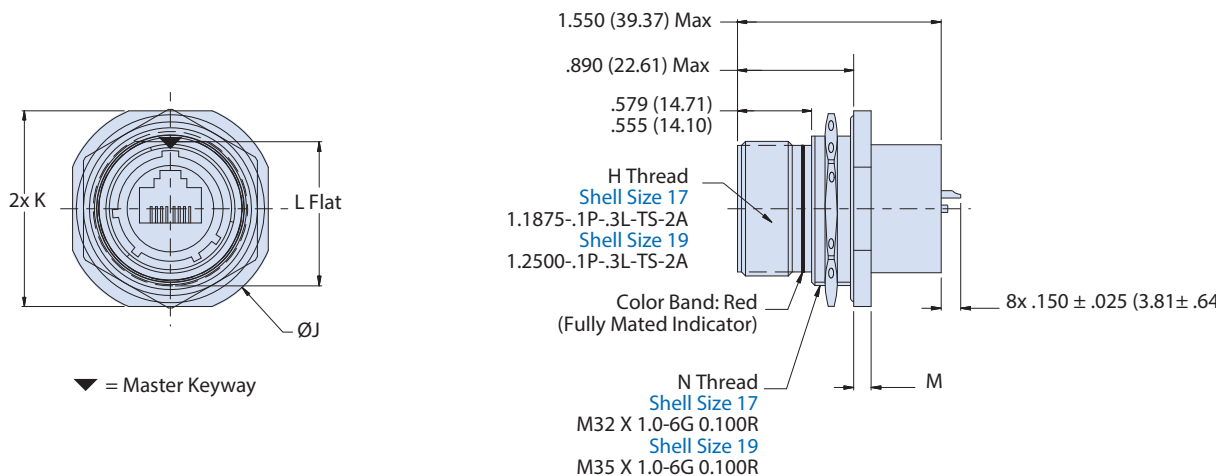
RJ45 CAT 5E/6A ETHERNET

MIL-DTL-38999 Series III Type Connectors



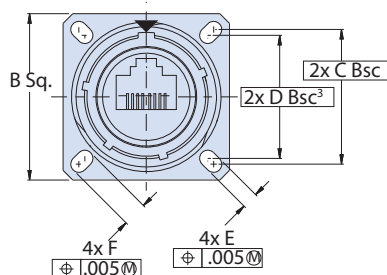
233-303 Receptacle with solder cups

07 - REAR PANEL MOUNT, JAM NUT RECEPTACLE

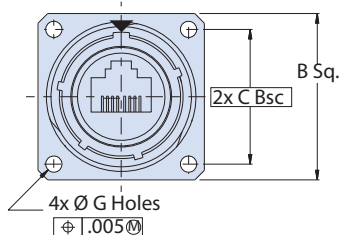


00, D0 AND CM - WALL MOUNT RECEPTACLES

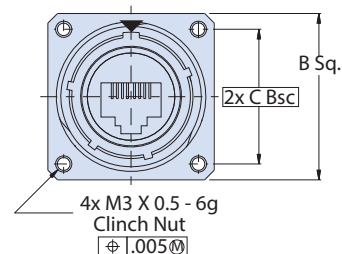
00 - Wall Mount Receptacle with Slotted Holes (Mating Face)



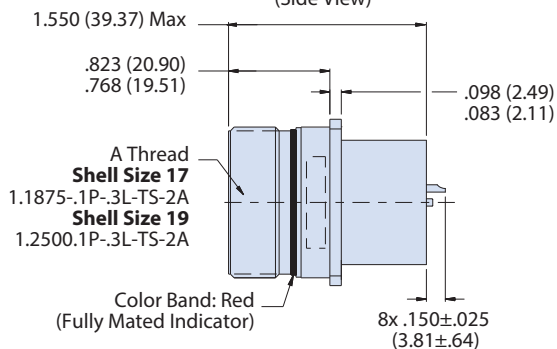
D0 - Wall Mount Receptacle with Round Holes (Mating Face)



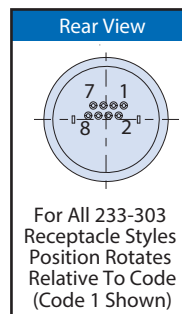
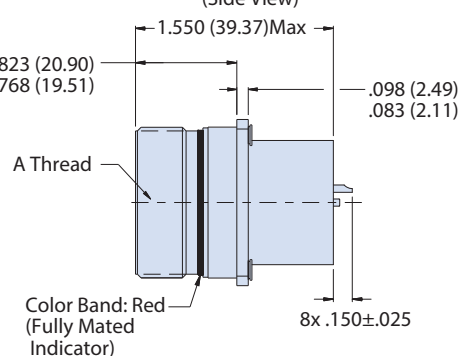
CM - Wall Mount Receptacle with Metric Clinch Nuts (Mating Face)



00 and D0 - Wall Mount Receptacle (Side View)



00 and D0 - Wall Mount Receptacle (Side View)





RJ45 CAT 5E ETHERNET

MIL-DTL-38999 Series III Type Connectors



233-304 Plug and receptacle adapter
with accessory thread

B

Part Number Development										
Sample Part Number	233-304	NF	00	17	G	35	P	5H	N	T
Basic Number	233-304									
Finish	See Material and Finish table									
Connector Style ¹	See Connector Style table									
Shell Size	17 ⁶ consult factory for other shell sizes									
Insert-to-Shell Grounding ²	– = Inline shielded RJ45 insert G = Shielded and grounded to shell									
Insert Arrangement	Per MIL-STD-1560; 17-26 or 17-35 ⁶									
Contact Style	P = Pin S = Socket									
RJ45 Category	5H = CAT 5e For Cat 6A applications consult factory									
Alternate Key Position ¹	Per MIL-DTL-38999 A, B, C, D, E, N = Normal									
Shrink Boot	T = Part No. 770-028 (Omit for None)									

NOTES

1. See Section A for alternate key/keyway positions and panel cutout dimensions
2. G option is inline shielded and grounded to shell, available for receptacle only
3. Connector style 00 with slotted hole is front panel mount only
4. Meets IP67 in unmated condition, IP68 mated
5. Both plug and receptacle connectors have rear RJ45 jack
6. Consult factory for alternate insert arrangements

Material and Finish	
NF	Aluminum/Cadmium Olive Drab
ME	Aluminum/Electroless Nickel
MT	Aluminum/Nickel PTFE
ZR	Aluminum/Black Zinc-Nickel

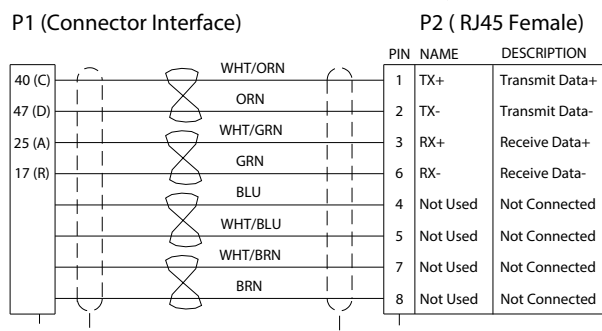
Connector Style ¹	
00	Wall mount receptacle with slotted holes ³
05	Inline Receptacle
07	rear panel mount, jam nut receptacle
D0	Wall mount receptacle with round holes
G6	plug
CM	Wall mount receptacle with metric clinch nuts

Thread Dimensions			
Shell Size	A Thread	G Thread	N Thread
17	1.1875-.1P-.3L-TS-2A	M25 x 1.0-6g 0.100R	M32 x 1.0-6g 0.100R
19	1.2500-.1P-.3L-TS-2A	M28 x 1.0-6g 0.100R	M35 x 1.0-6g 0.100R

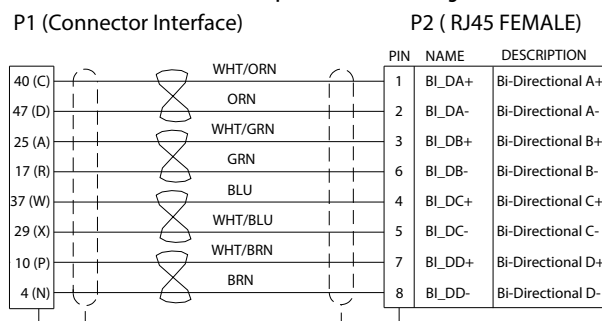
Wall Mount Receptacle Dimensions												
Shell Size	B Sq		C BSC		D BSC		E		F		Ø H Holes	
	In	mm	In	mm	In	mm	In	mm	In	mm	In	mm
17	1.323	33.60	1.062	26.97	.969	24.61	.136	3.45	.202	5.13	.136	3.45
	1.299	32.99										
19	1.449	36.80	1.156	29.36	1.062	26.97	.120	3.05	.186	4.72	.120	3.05
	1.425	36.20										

Jam Nut and Inline Dimensions											
Shell Size	Ø K		L		M Flat		R		S		
	In	mm	In	mm	In	mm	In	mm	In	mm	
17	1.764	44.81	1.642	41.71	1.191	30.25	.122	3.10	1.406	35.71	
	1.740	44.20	1.610	40.89	1.181	30.00	.083	2.11			
19	1.949	49.50	1.827	46.41	1.316	33.43	.153	3.89	1.516	38.51	
	1.925	48.90	1.795	45.59	1.306	33.17	.114	2.90			

Wiring Diagram for Ethernet 10base-T & 100 Base-TX 17-35 or (17-26 in parenthesis) Arrangement



Wiring Diagram for Ethernet 1000base-T (Gigabit Ethernet) 17-35 or (17-26 in parenthesis) Arrangement



Color Codes Per EIA/TIA 568B



RJ45 CAT 5E ETHERNET

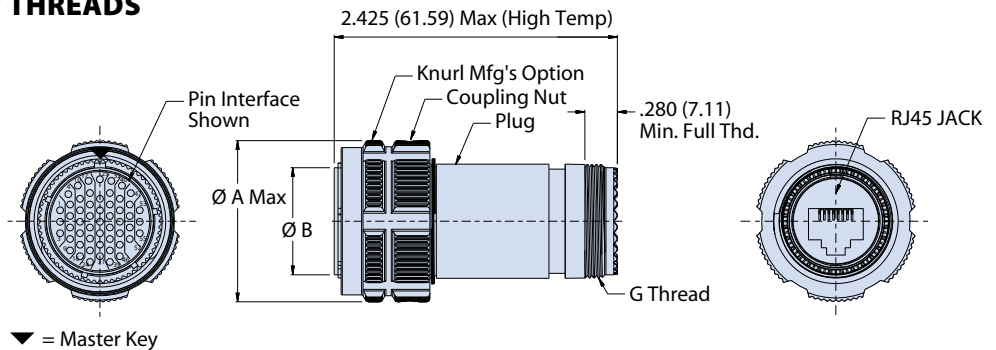
MIL-DTL-38999 Series III Type Connectors



233-304 Plug and receptacle adapter
with accessory thread

G6 - PLUG WITH ACCESSORY THREADS

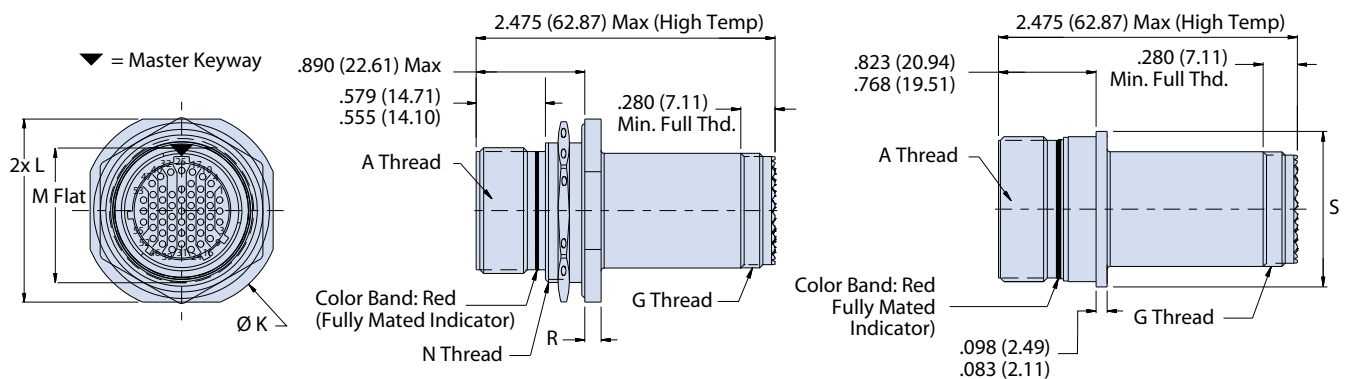
Plug Dimensions				
Shell Size	Ø A		Ø B	
	in	mm	in	mm
17	1.406	35.71	.928	23.57
			.922	23.42
19	1.516	38.51	1.033	26.24
			1.027	26.09



07 - REAR PANEL MOUNT, JAM NUT AND 05 - INLINE RECEPTACLE WITH ACCESSORY THREADS

Jam Nut Receptacle

Inline Receptacle
(side view only)

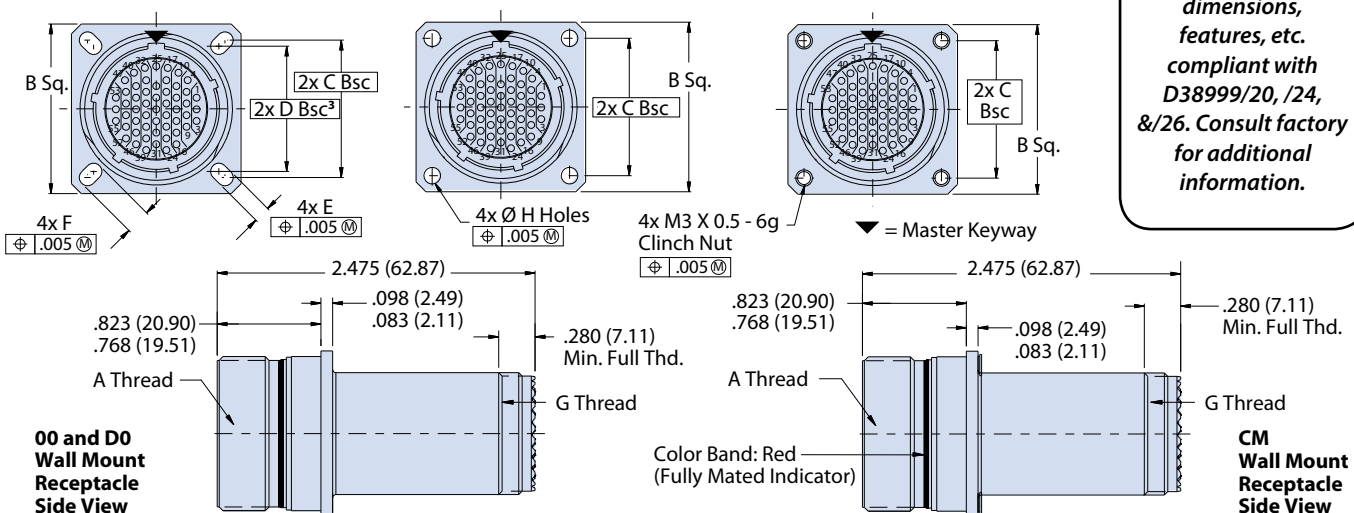


00, D0 AND CM - WALL MOUNT RECEPTACLES WITH ACCESSORY THREADS

00 - Wall Mount Receptacle
with Slotted Holes (Mating Face)

D0 - Wall Mount Receptacle
With Round Holes (Mating Face)

CM - Wall Mount Receptacle
With Metric Clinch Nuts (Mating Face)





RJ45 CAT 5E ETHERNET

MIL-DTL-38999 Series III Type Connectors



233-305 Quadrax interface adapter
with accessory threads

Receptacle
front View

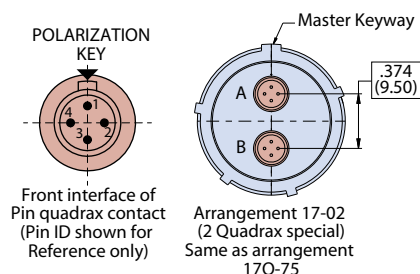


Receptacle
rear View



B

Partial View Of Connector Quadrax Interface



Material and Finish	
NF	Aluminum/Cadmium, Olive Drab
ME	Aluminum/Electroless Nickel
MT	Aluminum/Nickel PTFE
ZR	Aluminum/Black Zinc-Nickel

Connector Style	
05	Inline Receptacle
07	rear panel mount, jam nut receptacle
00	Wall mount receptacle with slotted holes
D0	Wall mount receptacle with round holes
CM	Wall mount receptacle with metric clinch nuts
G6	plug

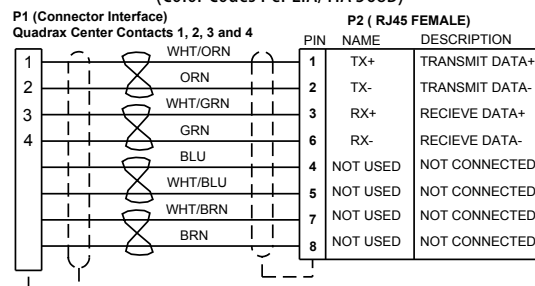
Jam Nut Dimensions					
Shell Size	Ø K	L	M Flat	R	Ø S
17	1.764 (44.81)	1.642 (41.71)	1.191 (30.25)	.122 (3.10)	1.275 (32.39)
	1.740 (44.20)	1.610 (40.89)	1.181 (30.00)	.083 (2.11)	
19	1.949 (49.50)	1.827 (46.41)	1.316 (33.43)	.153 (3.89)	1.337 (33.96)
	1.925 (48.90)	1.795 (45.59)	1.306 (33.17)	.114 (2.90)	

Part Number Development									
Sample Part Number	233-305	NF	00	-	17	5H	P	N	T
Basic Number	233-305								
Finish	See Material and Finish table								
Connector Style	See Connector Style table								
Insert-to-Shell Grounding²	- = Inline shielded RJ45 insert G = Shielded and grounded to shell								
Shell Size	17 or 19								
RJ45 Category	5H = CAT 5e For Cat 6A applications consult factory								
Contact Style	P = Pin S = Socket								
Alternate Key Position¹	A, B, C, D, E, N = Normal; Per MIL-DTL-38999								
Shrink Boot	T = Part No. 770-028 (Omit for None)								

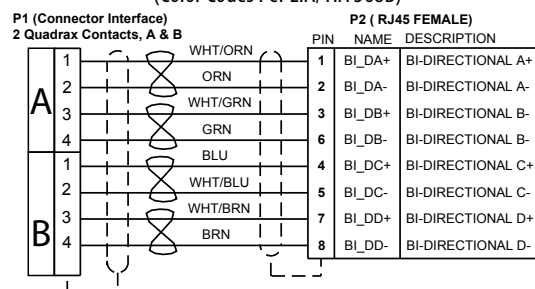
NOTES

- See Section A for alternate key/keyway positions and panel cutout dimensions
- G option is inline shielded and grounded to shell, available for receptacle only
- Pin contact mates with P/N 854-002 Socket contact mates with P/N 854-001
- Connector style 00 with slotted hole is front panel mount only
- Meets IP67 in unmated condition, IP68 mated
- Both plug and receptacle connectors have rear RJ45 jack

Wiring Diagram for Ethernet 10base-T & 100 Base-TX (Color Codes Per EIA/TIA 568B)



Wiring Diagram for Ethernet 1000base-T (Gigabit Ethernet) (Color Codes Per EIA/TIA 568B)



Thread Dimensions			
Shell Size	A Thread	G Thread	N Thread
17	1.1875-.1P-.3L-TS-2A	M25 x 1.0-6g 0.100R	M32 x 1.0-6g 0.100R
19	1.2500-.1P-.3L-TS-2A	M28x 1.0-6g 0.100R	M35 x 1.0-6g 0.100R

Wall Mount Receptacle Dimensions						
Shell Size	B Sq	C BSC	D BSC	E	F	Ø H Holes
17	1.323 (33.60)	1.062 (26.97)	.969 (24.61)	.136 (3.45)	.202 (5.13)	.136 (3.45)
	1.299 (32.99)					
19	1.449 (36.80)	1.156 (29.36)	1.062 (26.97)	.120 (3.05)	.186 (4.72)	.120 (3.05)
	1.425 (36.20)					



RJ45 CAT 5E ETHERNET

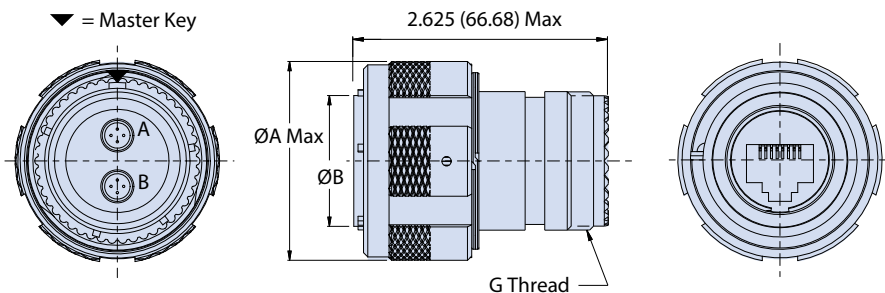
MIL-DTL-38999 Series III Type Connectors



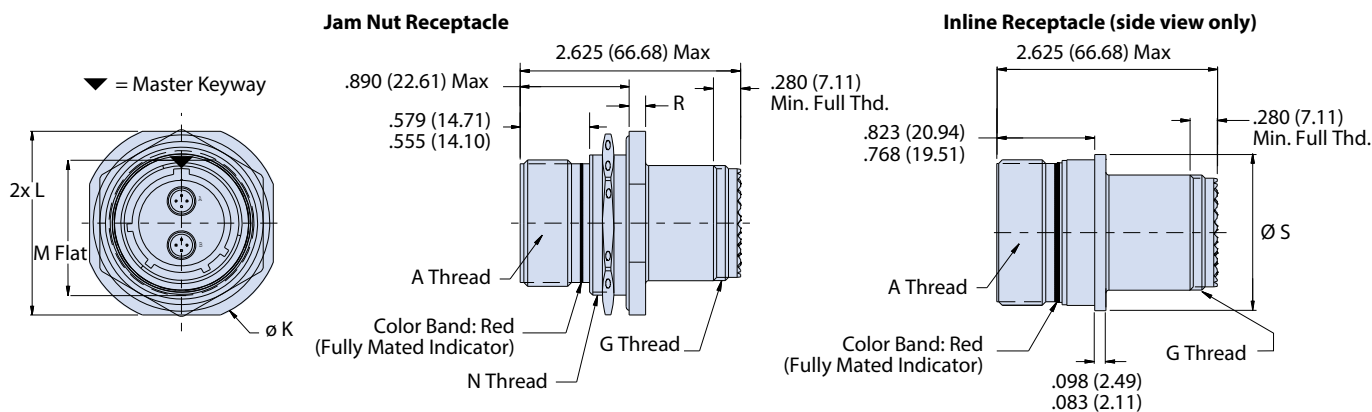
233-305 Quadrax interface adapter
with accessory threads

G6 - PLUG WITH ACCESSORY THREADS

Plug Dimensions				
Shell Size	Ø A		Ø B	
	in	mm	in	mm
17	1.406	35.71	.928	23.57
			.922	23.42
19	1.516	38.51	1.033	26.24
			1.027	26.09

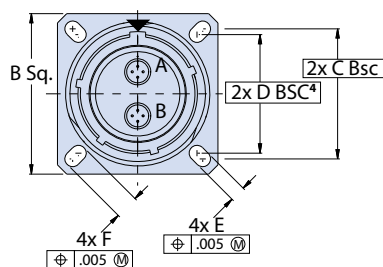


07 - REAR PANEL MOUNT, JAM NUT AND 05 - INLINE RECEPTACLE WITH ACCESSORY THREADS

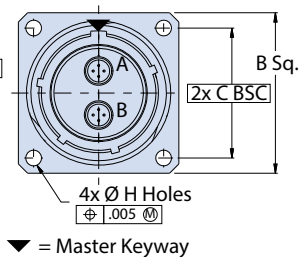


00, D0 AND CM - WALL MOUNT RECEPTACLES WITH ACCESSORY THREADS

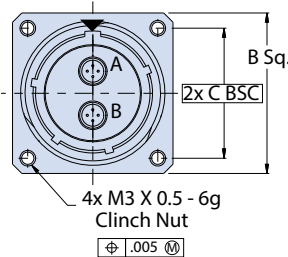
00 - Wall Mount Receptacle with Slotted Holes (Mating Face)



D0 - Wall Mount Receptacle With Round Holes (Mating Face)

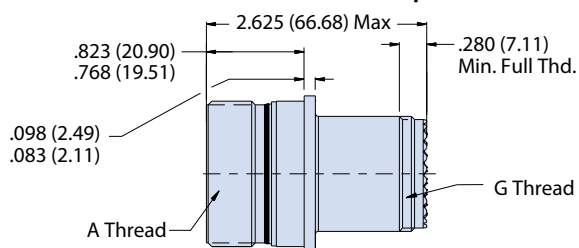


CM - Wall Mount Receptacle With Metric Clinch Nuts (Mating Face)

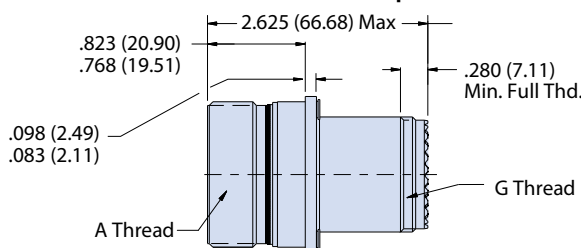


All external dimensions, features, etc. compliant with D38999/20, /24, &/26. Consult factory for additional information.

00 and D0 - Wall Mount Receptacle



CM - Wall Mount Receptacle



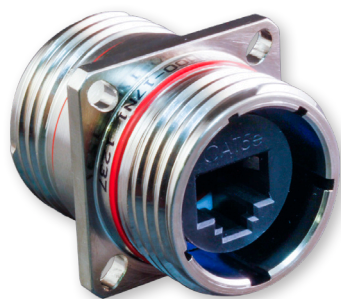


RJ45 CAT 5E/6A ETHERNET

MIL-DTL-38999 Series III Type Connectors



233-330 Feed-through receptacle connector



Receptacle front View

Part Number Development							
Sample Part Number	233-330	NF	00	-17	5H	N	1
Basic Number	233-330						
Finish	See Material and Finish table						
Connector Style ¹	See Connector Style table						
Shell Size	17 or 19						
RJ45 Category	5H = CAT 5e 6A = CAT 6A						
Alternate Key Position ¹	Per MIL-DTL-38999 A, B, C, D, E, N = Normal						
RJ45 Orientation	1, 2, 3, or 4						

Material and Finish

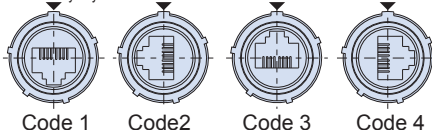
NF	Aluminum/Cadmium Olive Drab
ME	Aluminum/Electroless Nickel
MT	Aluminum/Nickel PTFE
ZR	Aluminum/Black Zinc-Nickel

Connector Style¹

00	Wall mount receptacle with slotted hole ²
07	Jam nut, rear panel mount receptacle
D0	Wall mount receptacle with round holes
CM	Wall mount receptacle with metric clinch nuts

RJ45 Orientation Options (Receptacle Face)

Master Keyway



All external dimensions, features, etc. compliant with D38999/20, /24, &/26. Consult factory for additional information.

Jam Nut Dimensions

Shell Size	Ø K		L		M Flat		R	
	in	mm	in	mm	in	mm	in	mm
17	1.764	44.81	1.642	41.71	1.191	30.25	.122	3.10
	1.740	44.20	1.610	40.89	1.181	30.00	.083	2.11
19	1.949	49.50	1.827	46.41	1.316	33.43	.153	3.89
	1.925	48.90	1.795	45.59	1.306	33.17	.114	2.90

Wall Mount Receptacle Dimensions

Shell Size	B Sq		C Bsc		D Bsc ²		E		F		Ø H Holes	
	In	mm	In	mm	In	mm	In	mm	In	mm	In	mm
17	1.323	33.60	1.062	26.97	.969	24.61	.136	3.45	.202	5.13	0.136	3.45
	1.299	32.99					.120	3.05	.186	4.72	0.120	3.05
19	1.449	36.80	1.156	29.36	1.062	26.97						
	1.425	36.20										

NOTES

1. See Section A for alternate key/keyway positions and panel cutout dimensions
2. front panel mount only
3. Meets IP67 in unmated condition, IP68 mated
4. Feed-thru receptacle is jack-to-jack configuration



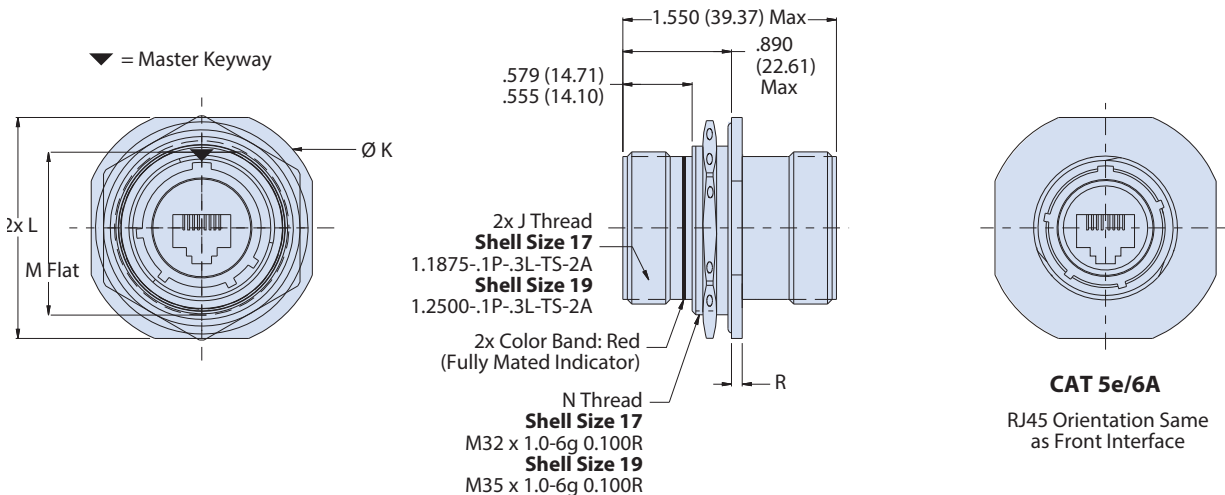
RJ45 CAT 5E/6A ETHERNET

MIL-DTL-38999 Series III Type Connectors



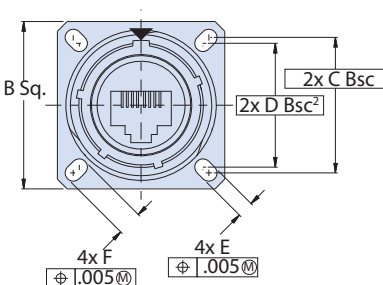
233-330 Feed-through receptacle connector

07 - REAR PANEL MOUNT, JAM NUT FEED-THROUGH RECEPTACLE

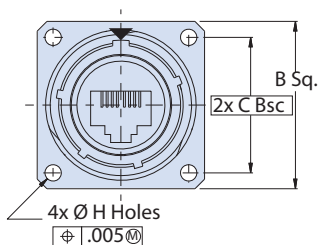


00, D0 AND CM - WALL MOUNT FEED-THRU RECEPTACLES

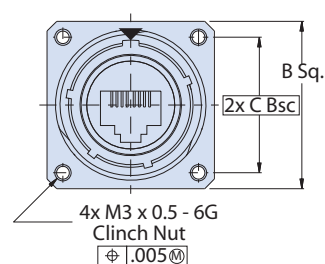
00 - Wall Mount Receptacle
with Slotted Holes
(Mating Face)



D0 - Wall Mount Receptacle
with Round Holes
(Mating Face)

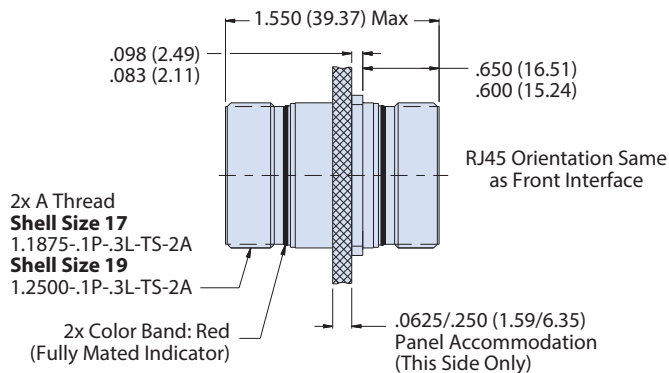


CM - Wall Mount Receptacle
With Metric Clinch Nuts
(Mating Face)

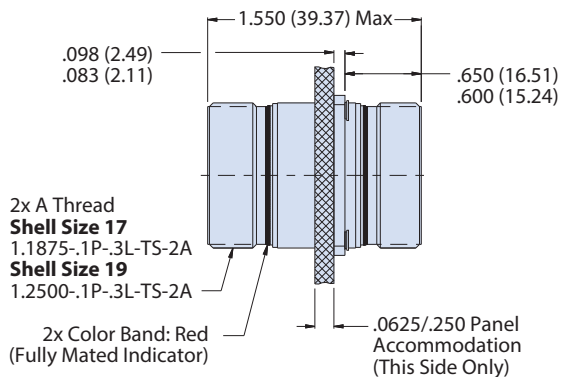


▼ = Master Keyway

00, D0, CM - Wall Mount Receptacle



CM - Wall Mount Receptacle





RJ45 CAT 5E ETHERNET

MIL-DTL-38999 Series III Type Connectors



CAT 5e cable assemblies

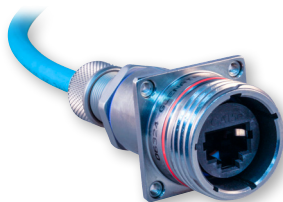
2330-0003 Glenair SuperNine RJ45 CAT 5e cable jumpers, SuperSeal to standard RJ45

SuperSeal RJ45 connectors are IP67 open face rated and IP68 in the mated condition for complete protection in harsh environments. SuperSeal connector styles include plug, wall mount and jam-nut receptacles. Wall mount receptacles are available with slotted holes, round holes and metric clinch nuts. All SuperSeal shells offer inline shielding and receptacle shells offer optional shell grounding. Any shell can be ordered with straight or right angle cable exit. RJ45 jack can be ordered in 1 of 4 available orientations to provide further security against mis-mating and accommodate existing RJ45 orientations. RJ45 connector end may be ordered as plug, jack or with flying leads in straight or right angle configurations. Maximum overall length is 100 feet. Consult factory for ordering information.

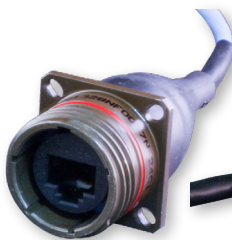
AVAILABLE INTERFACE OPTIONS



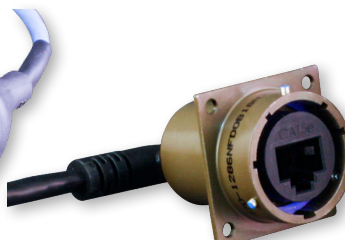
Plug



Wall mount
receptacle with
metric clinch nuts



Wall Mount
Receptacle with
round holes



Wall Mount
Receptacle with
round holes



Jam-nut mount
Receptacle

CAT 5E PLUG OPTIONS



CAT 5e, Straight

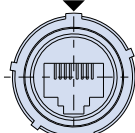


CAT 5e, 45°

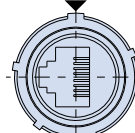
RJ45 ORIENTATION OPTIONS



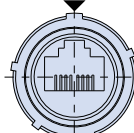
Master Keyway



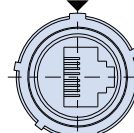
Code 1



Code 2



Code 3



Code 4



MIL-DTL-38999
TYPE HERMETIC
RJ45 ETHERNET
CONNECTOR

SUPERSEAL™

Glass-sealed Hermetic RJ45 Connectors

Helium Leak Testing

Series 23 SuperSeal hermetic connectors are 100% tested prior to shipment. A helium leak test is performed to certify the hermetic seal. This test is conducted by inducing 1ATM of vacuum on one side of the connector. Helium gas is released on the other side, and a mass spectrometer “counts” the number of helium molecules that penetrate the connector seal. Helium leak testing takes advantage of the small size of a helium molecule compared to air or water vapor. Helium is inert, rare in our atmosphere, and is easy to detect with a mass spectrometer. Series 806 hermetic connectors are designed specifically for commercial and military aircraft zones such as engine compartments. These areas are typically exposed to fuel, oil and changes in elevation. Such conditions present the need to protect sensitive electronic equipment from the effects of caustic chemicals and moisture ingress through standard environmental connectors where high pressure leads to sealing failure. Other aircraft locations such as the fuselage require hermetic connectors to maintain passenger cabin pressure while allowing for data transmission through separated compartments of the aircraft.



*Prevents damage from
moisture ingress and
caustic chemicals*

- Cat 5e and 6A
- 1×10^{-7} sccHe/sec @ 1 Atmosphere Differential
- Superior performance
- D38999 Series III type
- SuperSeal™ signature sealing and grounding



RJ45 CAT 5E/6A ETHERNET

MIL-DTL-38999 Series III Type Connectors



233-309 Hermetic RJ45 Feed-thru Connector with Crimp Removable Contacts

Material and Finish	
Z1	Stainless Steel/Passivate
ZL	Stainless Steel/Electro-deposited Nickel

Connector Style ¹	
00	Wall mount receptacle with slotted hole ²
07	Jam nut, rear panel mount receptacle
D0	Wall mount receptacle with round holes
CM	Wall mount receptacle with metric clinch nuts

NOTES

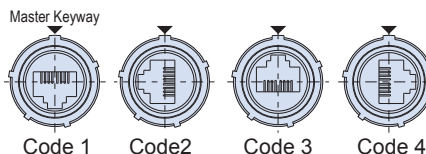
- See Section A for alternate key/keyway positions and panel cutout dimensions
- Front panel mount only
- Meets IP67 in unmated condition, IP68 mated
- Connector and contacts shall meet general requirements of MIL-DTL-38999, Series III. RJ45 connector meets TIA 568B standard.
- RJ45 Jack Specifications:
 - Shielded Cat5e RJ45 (grounded to PC board)
 - Wiring: straight through
 - RoHS compliant
 - Electrical: current rating: 1.5 Amp
 - D.W.V.: 1000 VDC (700 VAC)
 - Operating temperature range: -40°C to +120°C
- Hermeticity: $<1 \times 10^{-7}$ sccHe/sec @ 1 atmosphere differential
- Material/finishes:
 - Shell, jam nut: 300 series cres / passivate or plate
 - Insulator, hermetic: glass
 - Insulators: high grade rigid dielectric
 - Contacts: copper alloy/gold plate
 - Seals: fluorosilicone
 - RJ45 coupler housing: ULV94V-0 compliant ABS or PPS

Part Number Development								
Sample Part Number	233-309	Z1	00	-	17	5H	N	1
Basic Number	233-309							
Finish	See Material and Finish table							
Connector Style¹	See Connector Style table							
Shielding	- = Inline shielded RJ45 G = Inline shielded and grounded to the shells							
Shell Size	17 and 19							
RJ45 Category	5H = CAT 5e							
Alternate Key Position¹	Per MIL-DTL-38999 A, B, C, D, E, N = Normal							
RJ45 Orientation	1, 2, 3, or 4							

Jam Nut Dimensions								
Shell Size	Ø K		L		M Flat		R	
	in	mm	in	mm	in	mm	in	mm
17	1.764	44.81	1.642	41.71	1.191	30.25	.122	3.10
	1.740	44.20	1.610	40.89	1.181	30.00	.083	2.11
19	1.949	49.50	1.827	46.41	1.316	33.43	.153	3.89
	1.925	48.90	1.795	45.59	1.306	33.17	.114	2.90

Wall Mount Receptacle Dimensions												
Shell Size	B Sq		C Bsc		D Bsc ²		E		F		Ø H Holes	
	In	mm	In	mm	In	mm	In	mm	In	mm	In	mm
17	1.323	33.60	1.062	26.97	.969	24.61	.136	3.45	.202	5.13	0.136	3.45
	1.299	32.99										
19	1.449	36.80	1.156	29.36	1.062	26.97	.120	3.05	.186	4.72	0.120	3.05
	1.425	36.20										

RJ45 Orientation Options (Receptacle Face)



All external dimensions, features, etc. compliant with D38999/20, /24, &/26. Consult factory for additional information.

Jam Nut and Wall Mount Thread Dimensions			
Shell Size	A Thread	G Thread	N Thread (Jam-Nut Only)
17	1.1875-.1P-.3L-TS-2A	M25 x 1.0-6g 0.100R	M32 x 1.0-6g 0.100R
19	1.2500-.1P-.3L-TS-2A	M28x 1.0-6g 0.100R	M35 x 1.0-6g 0.100R

Jam Nut Dimensions					
Shell Size	Ø K	L	M Flat	R	Ø S
17	1.764 (44.81)	1.642 (41.71)	1.191 (30.25)	.122 (3.10)	1.275 (32.39)
	1.740 (44.20)	1.610 (40.89)	1.181 (30.00)	.083 (2.11)	
19	1.949 (49.50)	1.827 (46.41)	1.316 (33.43)	.153 (3.89)	1.337 (33.96)
	1.925 (48.90)	1.795 (45.59)	1.306 (33.17)	.114 (2.90)	

Wall Mount Receptacle Dimensions						
Shell Size	B Sq	C BSC	D BSC	E	F	Ø H Holes
17	1.323 (33.60)	1.062 (26.97)	.969 (24.61)	.136 (3.45)	.202 (5.13)	.136 (3.45)
	1.299 (32.99)					
19	1.449 (36.80)	1.156 (29.36)	1.062 (26.97)	.120 (3.05)	.186 (4.72)	.120 (3.05)
	1.425 (36.20)					



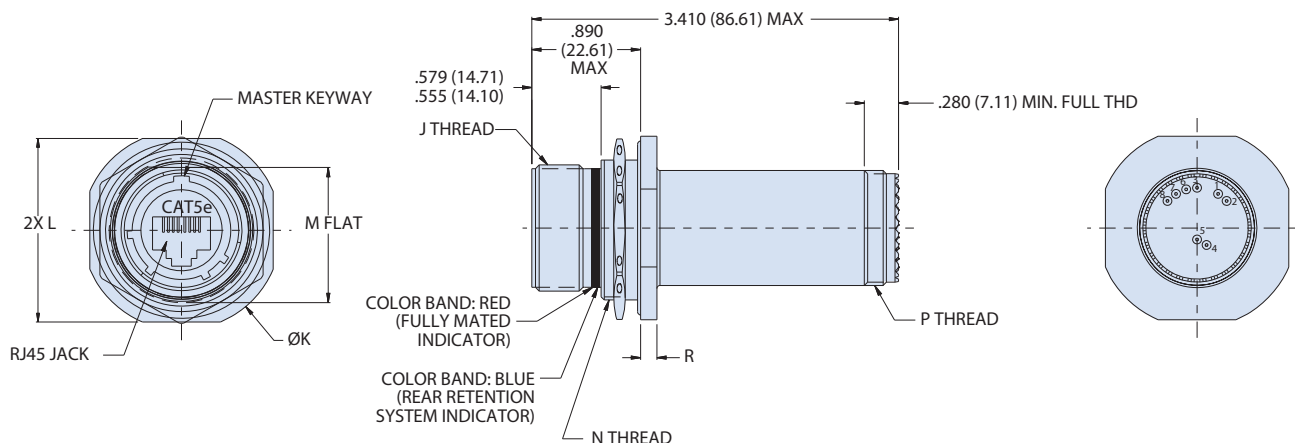
RJ45 CAT 5E/6A ETHERNET

MIL-DTL-38999 Series III Type Connectors



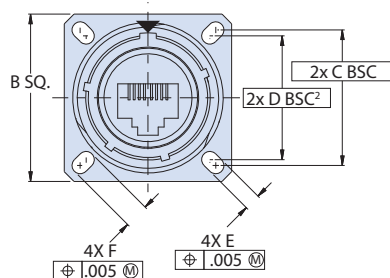
233-309 Hermetic RJ45 Feed-thru Connector with Crimp Removable Contacts

07 - REAR PANEL MOUNT, JAM NUT FEED-THROUGH CONNECTORS

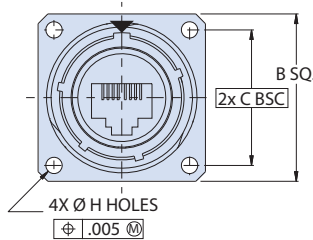


00, D0 AND CM - WALL MOUNT FEED-THRU CONNECTORS

00 - Wall Mount Receptacle with Slotted Holes (Mating Face)

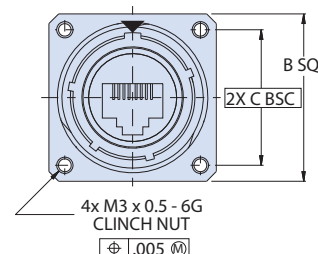


D0 - Wall Mount Receptacle With Round Holes (Mating Face)

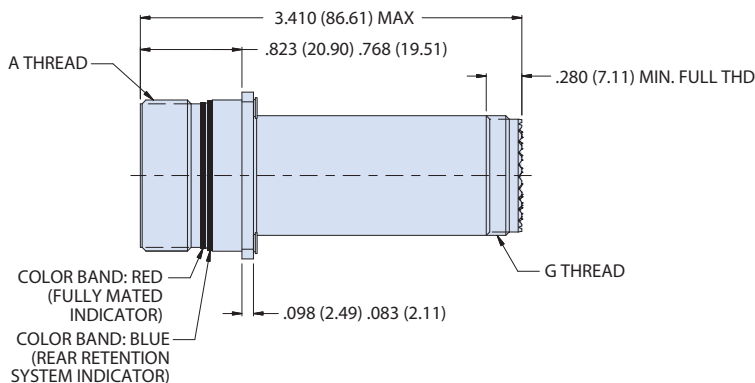


▼ = Master Keyway

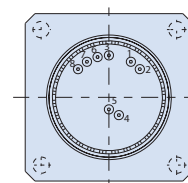
CM - Wall Mount Receptacle With Metric Clinch Nuts (Mating Face)



00, D0, CM - Wall Mount Receptacle



D0 - Wall Mount Receptacle Shown for Contact Termination Positions Only





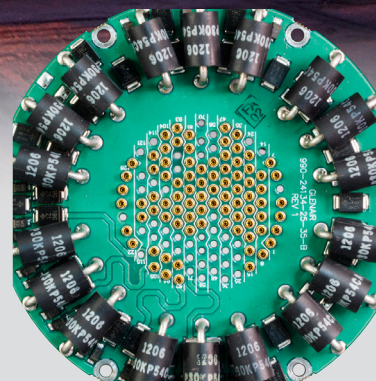
MIL-DTL-38999 TYPE
TVS FIELD-READY
RJ45 ETHERNET

FILTER
EMI EMP
CONNECTORS

SUPERSEAL™

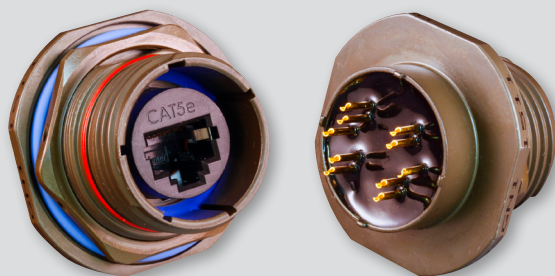
Transient Voltage Suppression (TVS) RJ45 Connectors

Transient Voltage Suppression (TVS) technologies are designed to shunt voltage transients directly to ground before such surges can damage sensitive electronic equipment. Individual TVS diodes as well as diode modules are incorporated directly into the TVS filter connector package to provide optimal protection for either individual contacts or groups of contacts without significant increases in connector size or weight. RTCA DO-160 and other electrical performance standards define acceptable benchmarks for withstanding electromagnetic pulse, lightning strike, or other induced voltage surges in high-reliability systems. For high-speed signals, care must be taken in selecting diodes to minimize capacitance loading effects which can lead to signal loss. Glenair SuperSeal™ TVS-equipped RJ45 connectors have been engineered to transmit high-speed signals while providing indirect lightning strike protection in accordance with the RTCA DO-160 standard.



***Prevents Catastrophic
EMP Failure in
Military and
Commercial Aircraft***

- **Electromagnetic pulse (EMP) protection**
- **Lightning protection**
- **Saves weight and space**
- **Superior performance**
- **D38999 Series III type**
- **SuperSeal™ signature sealing and grounding**



MIL-DTL-38999 type
Series III SuperNine
RJ45 receptacles
with transient
voltage suppression
technology



RJ45 CAT 5E ETHERNET RJ45 CAT 5e TVS connectors



TVS diode performance specifications and power selection

B

MIL-DTL-38999 Series III, TVS Diode, RJ45 CAT 5e and 6A Performance Specifications

Material and Finish

Shell/coupling Plating	Complete list of options available in the Material and Finish Options portion of this section
Contacts	PC tails or solder cup: copper alloy, gold plated
RJ45 coupler housing	UL94V-0 compliant ABS or PPS
Seals	Fluorosilicone
Shell Sizes	17 and 19

Environmental / Mechanical Performance

Sealing	IP68 mated condition, IP67 unmated condition
Outgassing	Mod Code 186S* Mod Code 928**
Operating Temperature	-20°C to +85°C
Vibration	20g's, 3 Axis, 10 - 2000Hz
Mechanical Shock	300 g's
Backshell Interface	MIL-DTL-38999 Designator H
Mating Cycles	500

* Meets outgassing requirements per ASTM E 595 and meets NASA screening requirements for level 1 highest reliability

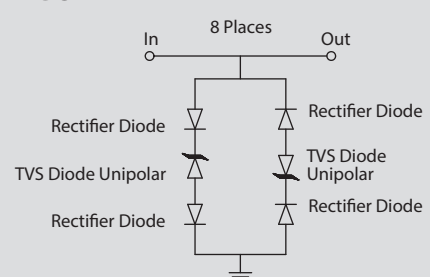
** Meets outgassing requirements per UL 94 V-0

MIL-DTL-38999 Series III, TVS Diode, RJ45 CAT 5e and 6A Performance Specifications

RJ45 Cat 6A & 5e Electrical Specifications

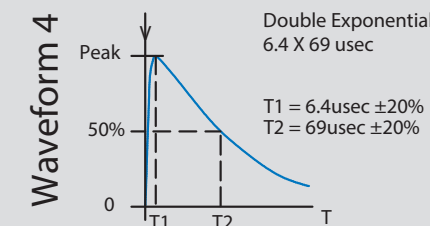
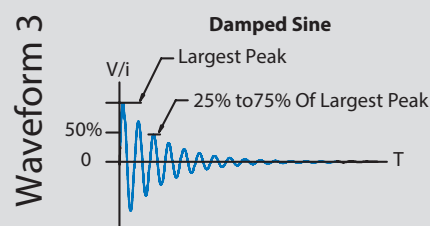
Voltage Rating	1000 Volts, Cat 5e
Data Rate	10BASE-T, 100BASE-TX, 1000BASE-T/1000BASE-TX
Current Rating	1.5 Amps, Cat 5e
D.W.V.	1000 VDC (700 VAC)
Frequency	100 MHz, Cat 5e
Wiring	Straight through
Cabling Length	100 Meters Max
Shield Continuity	Continuous Through Coupler and Grounded to the Shell

FIGURE 1



RTCA DO-160 Indirect Lightning Waveset A Waveforms

RTCA DO-160 Waveform	Level	Open Circuit Voltage/ Short Circuit Voltage V/A
Waveform 3	1	100/4
	2	250/10
Waveform 4	1	50/10
	2	125/25

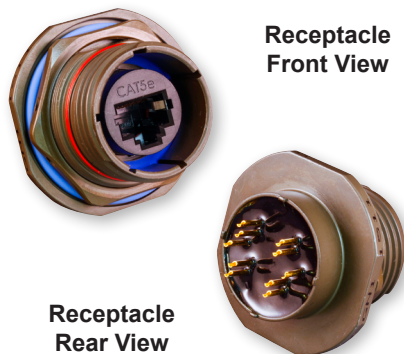




RJ45 CAT 5E ETHERNET RJ45 CAT 5e TVS connectors



244-001 Jam-nut receptacle, PC tail or solder cup
MIL-DTL-38999 Series III Type Connectors



Receptacle
Front View

Receptacle
Rear View

Material and Finish	
NF	Aluminum/Cadmium Olive Drab
ME	Aluminum/Electroless Nickel
MT	Aluminum/Nickel PTFE
ZR	Aluminum/Black Zinc-Nickel

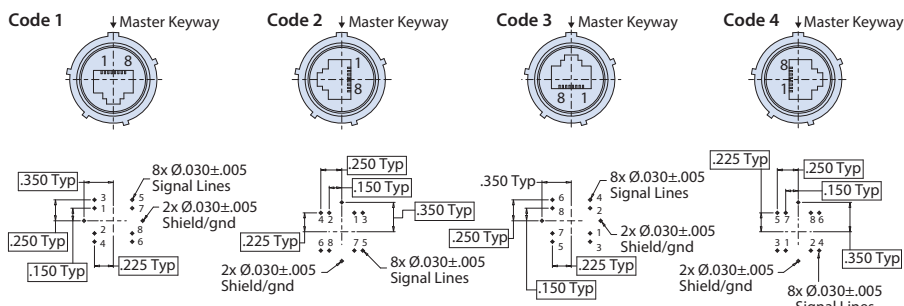
Part Number Development						
Sample Part Number	244-001	NF	19	P	G	N 1
Basic Number	244-001 with stand-offs					
Finish	See Material and Finish Table					
Shell Size	17 or 19					
Termination	P = PC tail S = Solder cup					
Insert-to-Shell Grounding	G = Shielded and grounded to shell					
Alternate Key Position ¹	Per MIL-DTL-38999 A, B, C, D, E, N = Normal ²					
RJ45 Orientation	1, 2, 3, or 4					

NOTES

- See Section A for alternate key/keyway positions and panel cutout dimensions
- See page B-24 for diode values

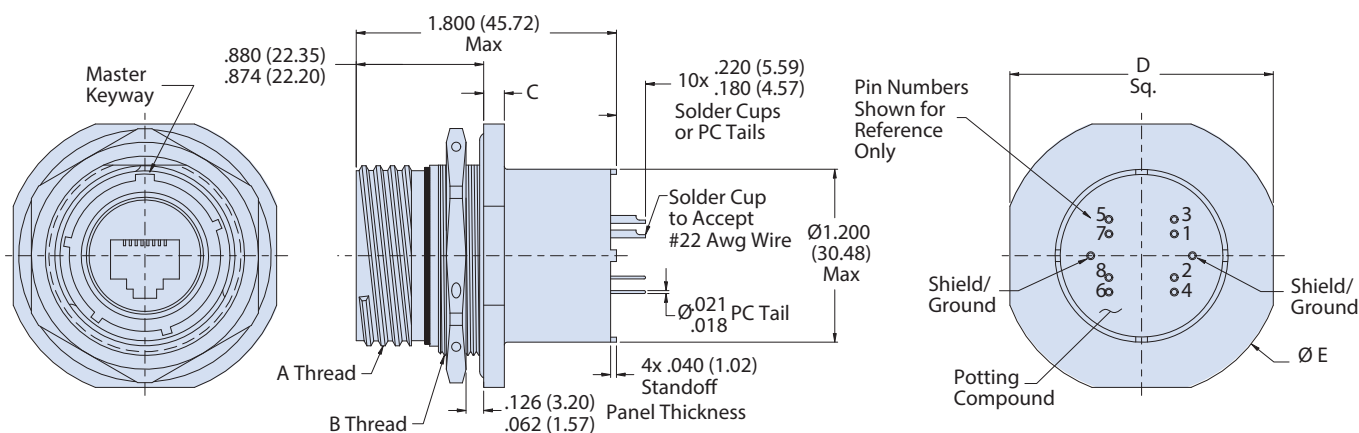
All external dimensions, features, etc.
compliant with D38999/20, /24, &/26.
Consult factory for additional information.

RJ45 ORIENTATION CODE AND PCB LAYOUT (PCB LAYOUT FOR PC TAIL VERSION)



Component Mounting Side

Jam Nut Dimensions												
Shell Size	A Thread	B Thread	C		D Sq.		Ø E		Ø F		G Flat	
			in	mm	in	mm	in	mm	in	mm	in	mm
17	1.1875-.1P-.3L-TS-2A	M32 x 1.0-6g 0.100R	.122 .083	3.10 2.11	1.642 1.610	41.71 40.89	1.764 1.740	44.81 44.20	1.270 1.260	32.56 32.00	1.210 1.200	30.73 30.48
19	1.2500-.1P-.3L-TS-2A	M35 x 1.0-6g 0.100R	.154 .114	3.91 2.90	1.827 1.795	46.41 45.59	1.949 1.925	49.50 48.90	1.395 1.385	35.43 35.18	1.335 1.325	33.91 33.66





RJ45 CAT 5E ETHERNET RJ45 CAT 5e TVS connectors



244-002 Wall mount receptacle, PC tail or solder cup
MIL-DTL-38999 Series III Type Connectors



Material and Finish¹

NF	Aluminum/Cadmium Olive Drab
ME	Aluminum/Electroless Nickel
MT	Aluminum/Nickel PTFE
ZR	Aluminum/Black Zinc-Nickel

NOTES

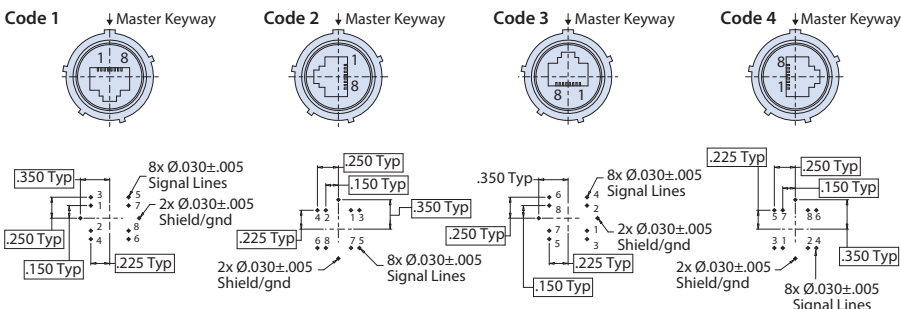
1. See Section A for alternate key/keyway positions and panel cutout dimensions
2. See page B-24 for diode values

*All external dimensions, features, etc.
compliant with D38999/20, /24, & /26.
Consult factory for additional information.*

Part Number Development

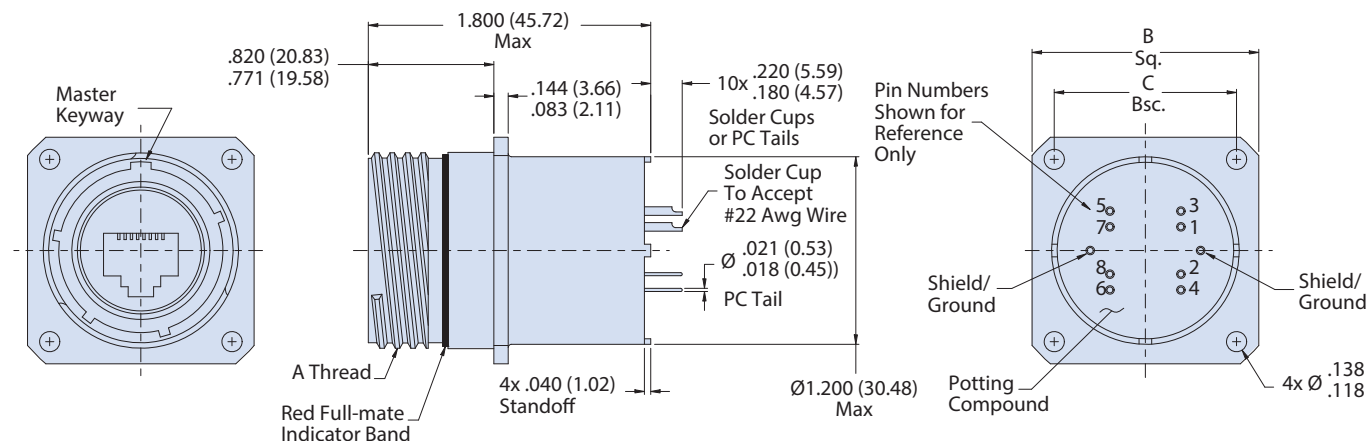
Sample Part Number	244-002	NF	19	P	G	N	1
Basic Number	244-002 with stand-offs						
Finish	See Material and Finish Table						
Shell Size	17 or 19						
Termination	P = PC tail S = Solder cup						
Insert-to-Shell Grounding	G = Shielded and grounded to shell						
Alternate Key Position ¹	Per MIL-DTL-38999 A, B, C, D, E, N = Normal						
RJ45 Orientation	1, 2, 3, or 4						

RJ45 ORIENTATION CODE AND PCB LAYOUT (PCB LAYOUT FOR PC TAIL VERSION)



Component Mounting Side

Jam Nut Dimensions									
Shell Size	A Thread	B Sq.		C Bsc		Ø D Min.		E Bsc	
		in	mm	in	mm	in	mm	in	mm
17	1.1875-.1P-.3L-TS-2A	1.323 1.299	33.60 32.99	1.062	26.97	1.219	30.96	1.062	26.97
19	1.2500-.1P-.3L-TS-2A	1.449 1.425	36.80 36.195	1.156	29.36	1.297	32.94	1.156	29.36





RJ45 CAT 5E ETHERNET RJ45 CAT 5e TVS connectors



244-003 Wall mount receptacle, PC tail or solder cup
MIL-DTL-38999 Series III Type Connectors



Material and Finish	
NF	Aluminum/Cadmium Olive Drab
ME	Aluminum/Electroless Nickel
MT	Aluminum/Nickel PTFE
ZR	Aluminum/Black Zinc-Nickel

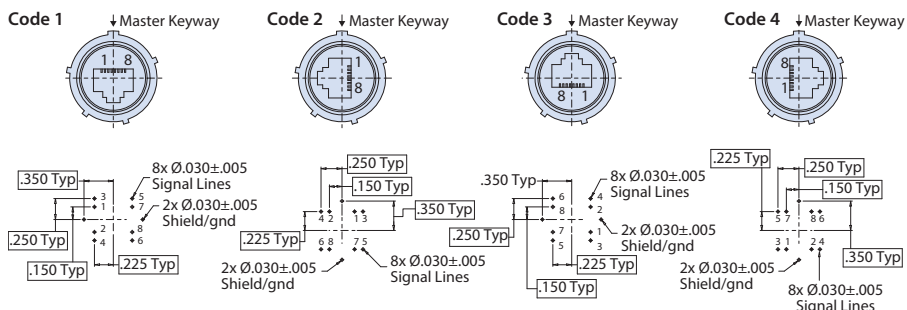
Part Number Development							
Sample Part Number	244-003	NF	19	P	G	N	1
Basic Number	244-003 with accessory thread						
Finish	See Material and Finish Table						
Shell Size	17 or 19						
Termination	P = PC tail S = Solder cup						
Insert-to-Shell Grounding	G = Shielded and grounded to shell						
Alternate Key Position ¹	Per MIL-DTL-38999 A, B, C, D, E, N = Normal						
RJ45 Orientation	1, 2, 3, or 4						

NOTES

- See Section A for alternate key/keyway positions and panel cutout dimensions
- See page B-24 for diode values

All external dimensions, features, etc.
compliant with D38999/20, /24, &/26.
Consult factory for additional information.

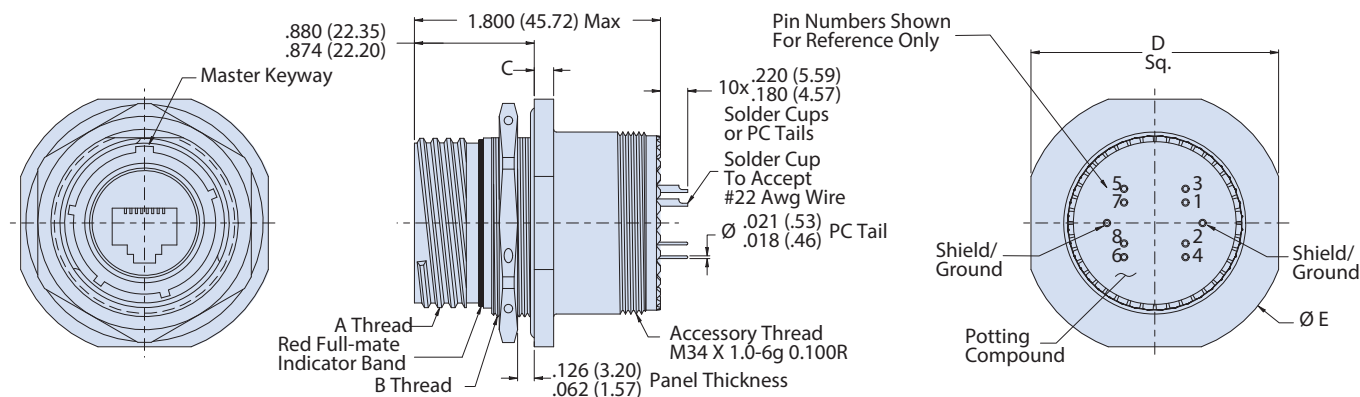
RJ45 ORIENTATION CODE AND PCB LAYOUT (PCB LAYOUT FOR PC TAIL VERSION)



Component Mounting Side

Jam Nut Dimensions												
Shell Size	A Thread	B Thread	C		D Sq.		Ø E		Ø F		G Flat	
			in	mm	in	mm	in	mm				
17	1.1875-.1P-.3L-TS-2A	M32 x 1.0-6g 0.100R	.122 .083	3.10 2.11	1.642 1.610	41.71 40.89	1.764 1.740	44.81 44.17	1.270 1.260	32.26 32.00	1.210 1.200	30.73 30.48
19	1.2500-.1P-.3L-TS-2A	M35 x 1.0-6g 0.100R	.154 .114	3.91 2.90	1.827 1.795	46.41 45.59	1.949 1.925	49.50 48.90	1.395 1.385	35.43 35.18	1.35 1.325	33.91 33.66

JAM-NUT RECEPTACLE WITH ACCESSORY THREADS





RJ45 CAT 5E ETHERNET

RJ45 CAT 5e TVS connectors

244-004 Wall mount receptacle, PC tail or solder cup
MIL-DTL-38999 Series III Type Connectors



Material and Finish

NF	Aluminum/Cadmium Olive Drab
ME	Aluminum/Electroless Nickel
MT	Aluminum/Nickel PTFE
ZR	Aluminum/Black Zinc-Nickel

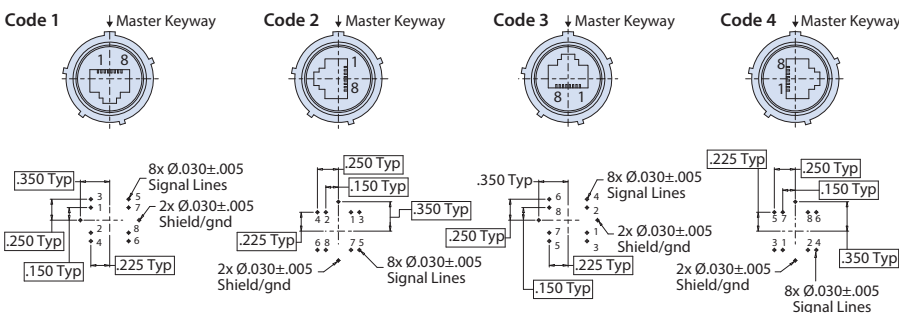
NOTES

- See Section A for alternate key/keyway positions and panel cutout dimensions
- See page B-24 for diode values

*All external dimensions, features, etc.
compliant with D38999/20, /24, & /26.
Consult factory for additional information.*

Part Number Development						
Sample Part Number	244-004	NF	19	P	G	N 1
Basic Number	244-004 with accessory thread					
Finish	See Material and Finish Table					
Shell Size	17 or 19					
Termination	P = PC tail S = Solder cup					
Insert-to-Shell Grounding	G = Shielded and grounded to shell					
Alternate Key Position	Per MIL-DTL-38999 A, B, C, D, E, N = Normal					
RJ45 Orientation	1, 2, 3, or 4					

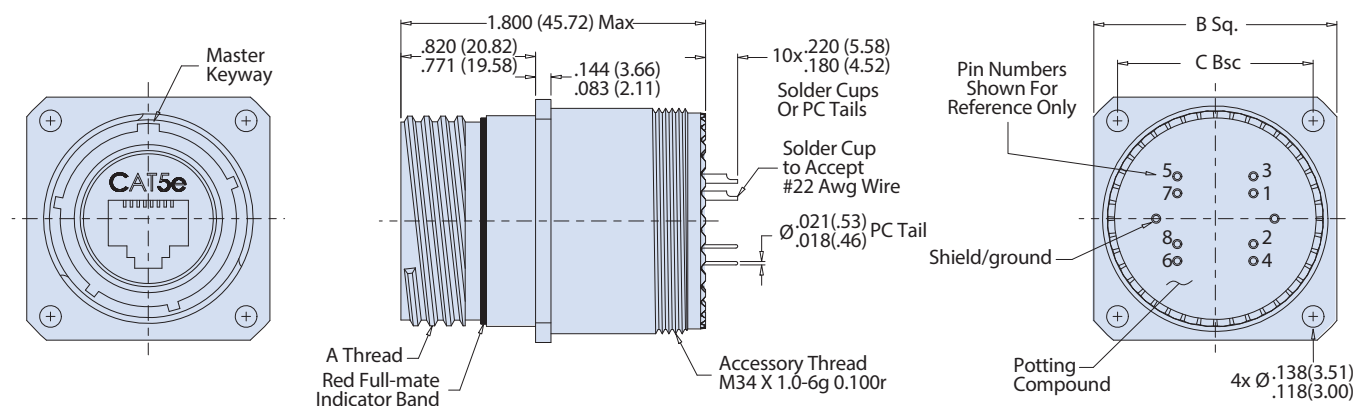
RJ45 ORIENTATION CODE AND PCB LAYOUT (PCB LAYOUT FOR PC TAIL VERSION)



Component Mounting Side

Jam Nut Dimensions									
Shell Size	A Thread	B Sq.		C Bsc		Ø D Min		E Bsc	
		in	mm	in	mm	in	mm	in	mm
17	1.1875-.1P-.3L-TS-2A	1.323 1.299	33.60 32.99	1.062	26.97	1.219	30.96	1.062	26.97
19	1.2500-.1P-.3L-TS-2A	1.449 1.425	36.80 36.195	1.156	29.36	1.297	32.94	1.156	29.36

REAR PANEL MOUNT RECEPTACLE WITH ACCESSORY THREADS



MIL-DTL-38999 TYPE
FIELD-READY
USB 2.0

SUPERSEAL™

Rugged environmental MIL-DTL-38999 type connectors with IP67 open-face sealing, robust insert-to-shell grounding, and a complete range of wire, cable, and circuit board terminations



SuperSeal™ USB 2.0 Advantages

- Superior sealing—IP67 open face and IP68 mated—for complete system protection against water, sand and dust
- Highly durable USB 2.0 design, including enhanced operating temperature, increased life-cycle, and rugged vibration and shock performance
- Shielded/grounded receptacle connectors
- Crimp, solder-cup, PC tail, contact/wire termination options
- Scoop-proof, self-locking, triple-start threaded coupling (MIL-DTL-38999 Series III type)



Glenair, Inc.
1211 Air Way
Glendale, CA 91201-2497
818-247-6000
sales@glenair.com
www.glenair.com



SERIES 23

SuperSeal™

USB 2.0 and 3.0 and 3.2 Ruggedized solutions

38999 Type SuperSeal ruggedized connectors offer outstanding metal-to-metal grounding sealing performance for commercial, USB 2.0 and high-speed USB 3.0 interfaces in a standard 38999 type package. Both versions are IP68 rated when mated and IP67 rated in the unmated condition for complete system protection against water sand and dust. Glenair USB 2.0 and 3.0 solutions are perfectly suited for field communications where connecting external peripherals such as storage devices, printers, and standard mouse and keyboard input devices. Beyond the addition of standard USB type peripherals these protocols also offer a means to connect other protocol based hardware through the use of supported adapters, including Ethernet RJ45 and HDMI (USB 3.0 preferred). 38999 Type SuperSeal USB connectors feature polarized keys to prevent mismatching and non-corrosive, conductive material and finish options. Highly durable SuperSeal™ insert design, provides enhanced operating temperature, increased life-cycle, and rugged vibration and shock performance. Simple plug-and-play connectivity and *hot-swappable* addition of external peripherals without restarting systems. Crimp, solder-cup, PC tail and cable assemblies available



USB 2.0 AND 3.0 CONNECTOR



USB 2.0
connectors
begin on page
C-3



USB 3.0
connectors
begin on page
C-21



USB 3.2
connectors
begin on page
C-40



USB 2.0 TYPE A CONNECTORS

MIL-DTL-38999 Series III Type Connectors



Product Selection Guide



233-340

C-4

SuperSeal™ Coupler with Accessory Threads and USB 2.0/3.0 Male-to-Female (Plug) or Female-to-Female Receptacle



233-345

C-14

SuperSeal Connectors with Accessory Threads and USB 2.0 Male (Plug) or Female (Receptacle) Interface to Crimp Removable Contacts



233-341

C-6

SuperSeal Receptacle with crimp removable contacts. USB 2.0 Female Interface to PC Tail Termination



233-370

C-16

SuperSeal Feed-thru Receptacle with USB 2.0 Female-to-Female Interface



233-342

C-8

SuperSeal Receptacle with USB 2.0 Female Interface to PC Tail Termination



233-390

C-18

SuperSeal USB 2.0 Memory Stick



233-343

C-10

SuperSeal Receptacle with USB 2.0 Female Interface to Solder Cup Termination



233-92

C-19

SuperSeal USB 3.0 Memory Stick



233-344

C-12

SuperSeal Receptacle Adapter with Accessory Threads and Pin or Socket Contacts to USB 2.0 Female Interface



Cable Assemblies

E-20

SuperSeal USB 3.0 Cable Assemblies



USB 2.0 AND 3.0 TYPE A CONNECTORS

MIL-DTL-38999 Series III Type Connectors



Performance Specifications

USB 2.0 Performance Specifications

Property	Description
Material and Finish	
Shell/Coupling and Plating	Aluminum, cad/o.d., electroless nickel, nickel PTFE, black zinc nickel
Contacts	PC tails, solder cup, and crimp contacts: copper alloy, gold plated
USB Insulator	LCP
Grommet, Peripheral Seal, Interfacial Seal, O-ring	Blended fluorosilicone/silicone elastomer, 30% silicone per ZZ-R-765, 70% fluorosilicone per MIL-R-25988
Shell Sizes	15 Consult factory for other shell size options

Electrical Specifications

Data Rate	480 Mbps
Power Usage	500 milliamps (mA)
Current Rating	1.5 Amps,
D.W.V.	500 VAC
I.R.	1000 MegOhms
Cabling Length	5.0 Meters Max
Shielding	Continuous through coupler or continuous coupler to shell

Environmental/Mechanical Performance

Sealing	IP68 mated condition, IP67 unmated condition
Outgassing	Mod Code 186S meets outgassing requirements per ASTM E 595 and meets NASA level 3 screening for standard reliability Mod Code 928 meets outgassing requirements per UL 94 V-0
Operating Temperature	-40°C to +120°C
Vibration	20g's, 3 Axis, 10 - 2000Hz
Mechanical Shock	300 g's
Backshell Interface	MIL-DTL-38999 Designator H
Mating System	Triple-start stub ACME
Mating Cycles	500

USB 3.0 Performance Specifications

Property	Description
Material and Finish	
Shell/Coupling and Plating	Aluminum, cad/o.d., electroless nickel, nickel PTFE, black zinc nickel
Contacts	PC tails, solder cup, and crimp contacts: copper alloy, gold plated
USB Insulator	LCP
Grommet, Peripheral Seal, Interfacial Seal, O-ring	Blended fluorosilicone/silicone elastomer, 30% silicone per ZZ-R-765, 70% fluorosilicone per MIL-R-25988
Shell Sizes	15 Consult factory for other shell size options

Electrical Specifications

Data Rate	5.0 Gbps
Power Usage	500 milliamps (mA)
Current Rating	1.5 Amps,
D.W.V.	500 VAC
I.R.	1000 MegOhms
Cabling Length	3.0 Meters Max
Shielding	Continuous through coupler or continuous coupler to shell

Environmental/Mechanical Performance

Sealing	IP68 mated condition, IP67 unmated condition
Outgassing	Mod Code 186S meets outgassing requirements per ASTM E 595 and meets NASA level 3 screening for standard reliability Mod Code 928 meets outgassing requirements per UL 94 V-0
Operating Temperature	-40°C to +85°C
Vibration	20g's, 3 Axis, 10 - 2000Hz
Mechanical Shock	300 g's
Backshell Interface	MIL-DTL-38999 Designator H
Mating System	Triple-start stub ACME
Mating Cycles	500



USB 2.0 TYPE A CONNECTORS

MIL-DTL-38999 Series III Type Connectors



233-340 Couplers with accessory threads



Plug
Front View



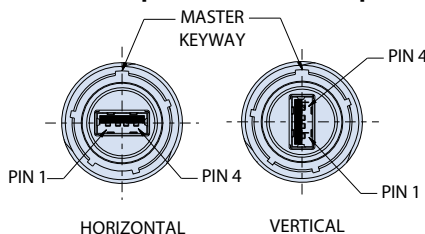
Square Flange
Receptacle
Front View



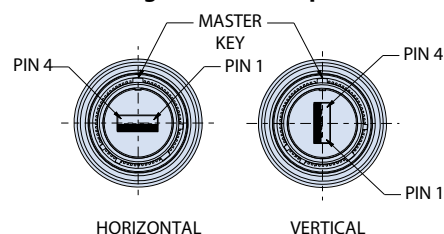
Jam Nut Receptacle
Front View

Part Number Development										
Sample Part Number	233-340	NF	00	-15	2	A	A	N	H	T
Basic Number	233-340									
Finish	See Material and Finish table									
Connector Style ¹	See Connector Style table									
Shell Size	15									
USB Performance	2 = USB 2.0									
USB Front Interface	A = Type A									
USB Back Interface	A = Type A									
Alternate Key Position ¹	A, B, C, D, E, N = Normal per MIL-DTL-38999									
USB Orientation	H = Horizontal V = Vertical									
Shrink Boot	T = Part No. 770-028 (Omit for None)									

USB Receptacle Orientation Options



USB Plug Orientation Options



Material and Finish

NF	Aluminum/Cadmium, Olive Drab
M	Aluminum/Electroless Nickel
MT	Aluminum/Nickel PTFE
ZR	Aluminum/Black Zinc-Nickel

All external dimensions, features, etc. compliant with D38999/20, /24, &/26. Consult factory for additional information.

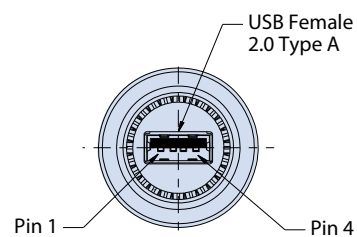
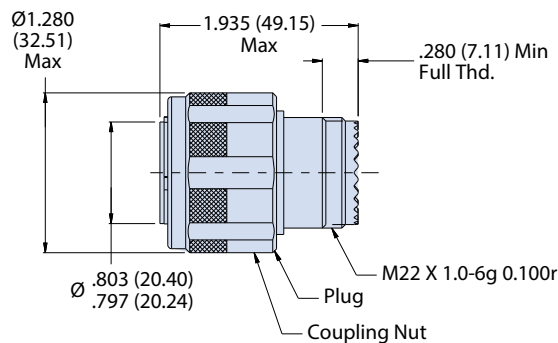
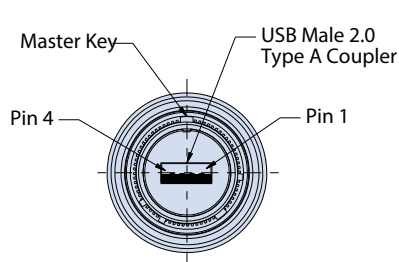
Connector Style

G6	Plug
07	Rear panel mount, jam nut receptacle
00	Wall mount receptacle with slotted holes
D0	Wall mount receptacle with round holes
CM	Wall mount receptacle with metric clinch nuts

USB 2.0 Wiring

Pin	Name	Cable Color (USB)	Description	Recommended Wire Sizes (AWG)
1	(V Bus)	Red	+5 V	22
2	(D-)	White	Data -	28
3	(D+)	Green	Data +	28
4	(GND)	Black	Ground	22

G6 - PLUG WITH ACCESSORY THREADS





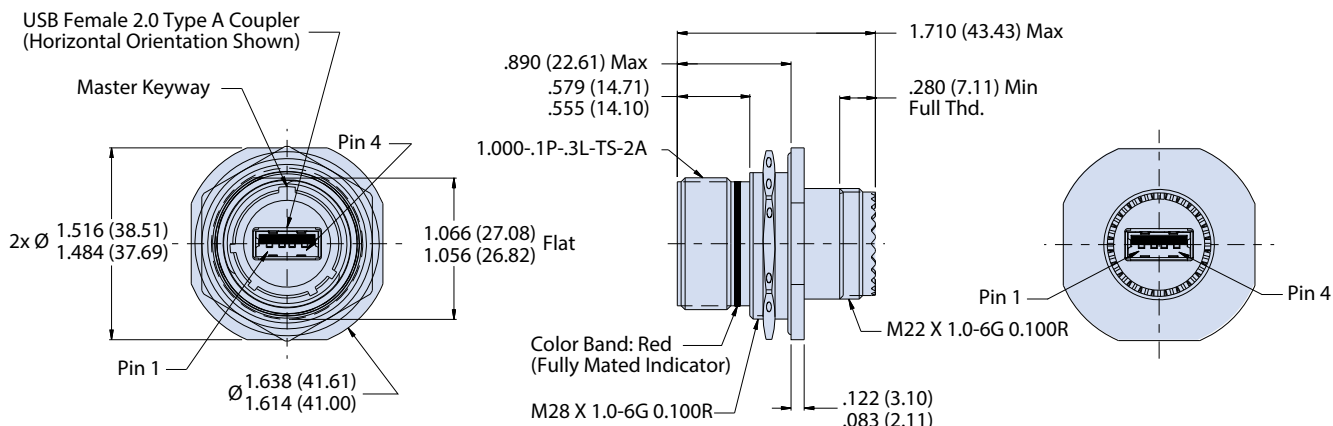
USB 2.0 TYPE A CONNECTORS

MIL-DTL-38999 Series III Type Connectors



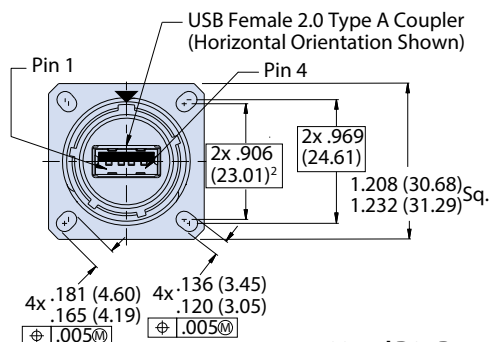
233-340 Couplers with accessory threads

07 - REAR PANEL MOUNT, JAM NUT RECEPTACLE WITH ACCESSORY THREADS

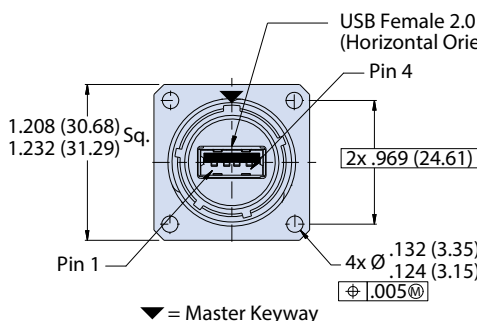


00, DO AND CM - WALL MOUNT RECEPTACLES WITH ACCESSORY THREADS

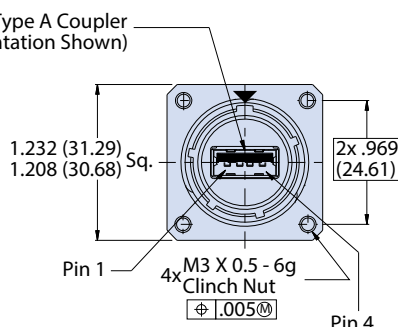
00 - Slotted Hole Receptacle Face View



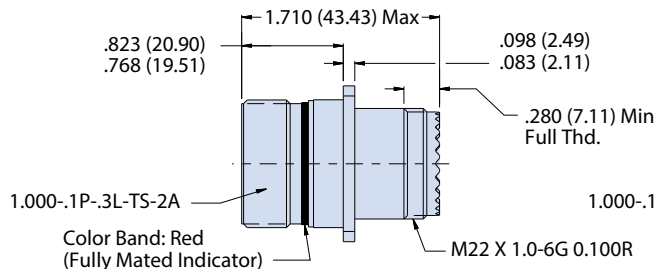
DO - Round Hole Receptacle Face View



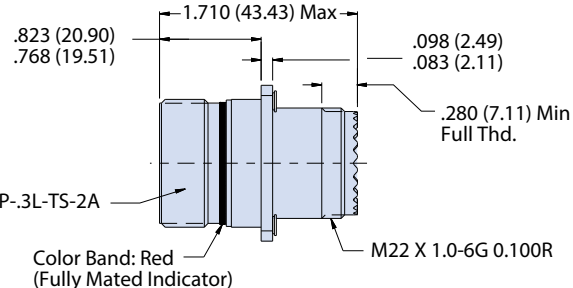
CM - Clinch Hole Receptacle Face View



00 and DO - Receptacle Side View



CM - Receptacle Side View



NOTES

1. See Section A for alternate key/keyway positions and panel cutout dimensions
2. Meets IP67 in unmated condition, IP68 mated
3. Receptacle has USB female receptacle, plug has USB male plug

4. Material and Finish
 - Shell, jam nut: al alloy
 - Insulators: high grade rigid dielectric/ n.a.
 - Contacts: copper alloy, gold plated
 - Seals: silicone based elastomer

- USB (shell/contacts): copper alloy
- Dielectric: hi-temp thermoplastic PA9T UL94V-0
- Hardware: stainless steel /passivated



USB 2.0

MIL-DTL-38999 Series III Type Connectors



233-341 USB 2.0 Type A receptacle
to size 22D crimp removable contacts



Plug
Front View



Jam Nut
Receptacle
Front View



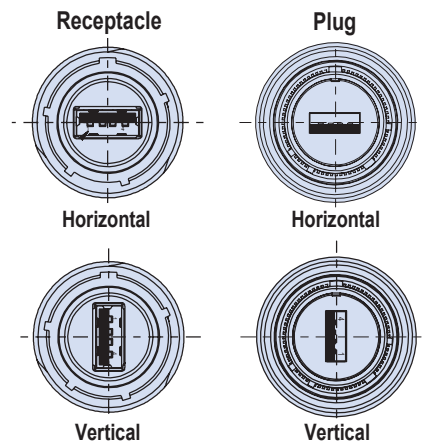
Square Flange
Receptacle
Rear View

How to Order									
Sample Part Number	233-341	NF	00	-15	2	A	N	H	T
Basic Number	233-341								
Finish¹	See Material and Finishes table¹								
Connector Style¹	See connector style table								
Shell Size	15								
RJ45 Category	2 = USB 2.0								
USB Interface Type	A = Type A								
Alternate Key Position¹	A, B, C, D, E, N = Normal; per MIL-DTL-38999								
USB Orientation	H = Horizontal V = Vertical								
Shrink Boot	T = Shrink Boot (Omit for None)								

233-341 Superseded by 233-345

Connector Style ¹	
00	Square flange receptacle with slotted holes
07	Jam nut receptacle
D0	Wall mount receptacle with slotted holes
CM	Wall mount receptacle with metric clinch nuts
G6	Plug

USB Orientation Options (Partial Views Shown)



All external dimensions, features, etc. compliant with D38999/20, /24, &/26. Consult factory for additional information.

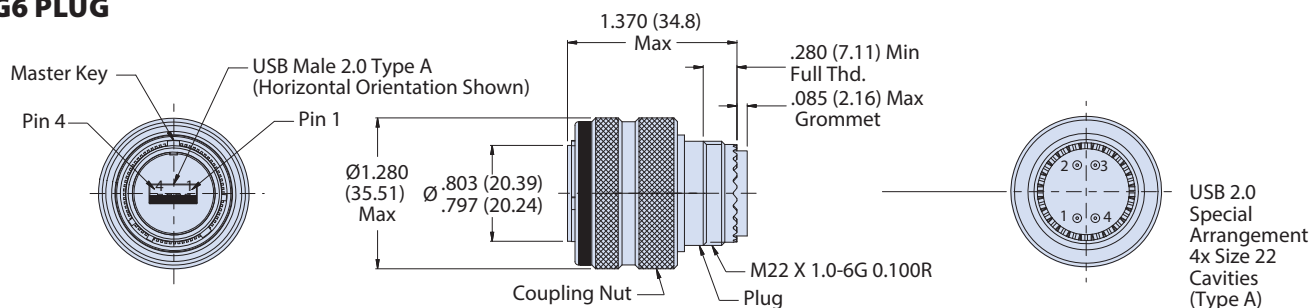
Materials and Finishes ¹	
NF	Cadmium olive drab
M	Electroless nickel
MT	Nickel PTFE

NOTES

- See Section A for alternate key positions, panel cutout dimensions and complete material and finish options
- Front panel mount only
- All external dimensions, features, etc. Compliant with D38999/20, /24 &/26. Consult factory for additional information

USB 2.0 Wiring				
Pin	Name	Cable Color (USB)	Description	Recommended Wire Sizes (AWG)
1	(V Bus)	Red	+5 V	22
2	(D-)	White	Data -	28
3	(D+)	Green	Data +	28
4	(GND)	Black	Ground	22

G6 PLUG





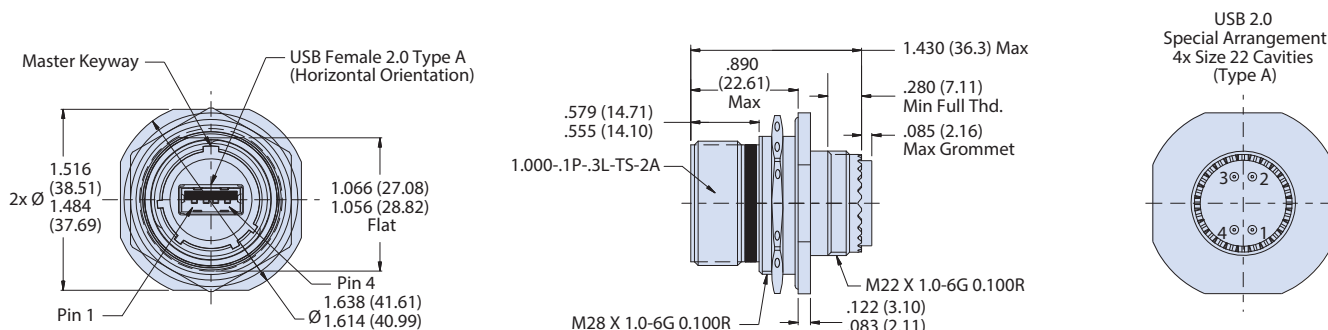
USB 2.0

MIL-DTL-38999 Series III Type Connectors

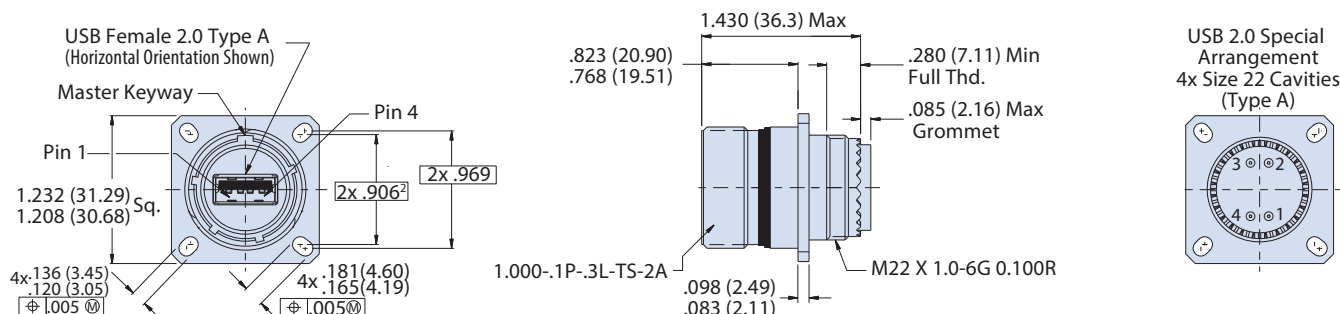


233-341 USB 2.0 Type A receptacle
to size 22D crimp removable contacts

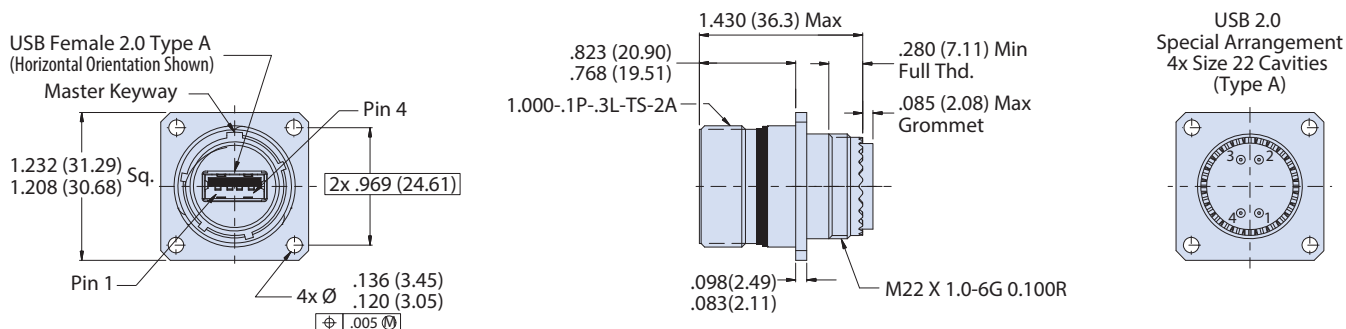
07 - REAR PANEL MOUNT, JAM NUT RECEPTACLE WITH ACCESSORY THREADS



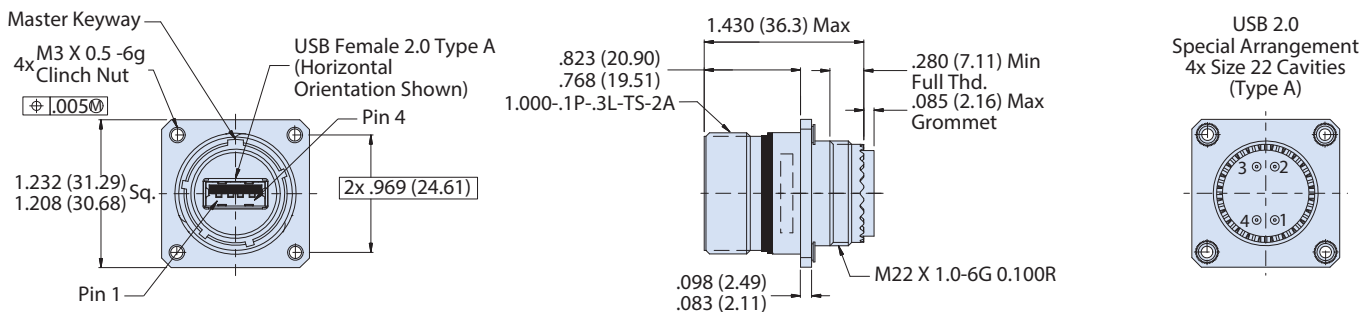
00 WALL MOUNT RECEPTACLE WITH ACCESSORY THREADS



DO - WALL MOUNT RECEPTACLES WITH ACCESSORY THREADS



CM - WALL MOUNT RECEPTACLES WITH ACCESSORY THREADS





USB 2.0 TYPE A CONNECTORS

MIL-DTL-38999 Series III Type Connectors



233-342 Receptacle with PC tails



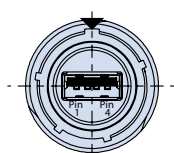
**Jam Nut Receptacle
Rear View**



**Jam Nut Receptacle
Front View**

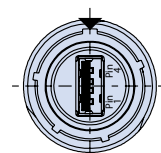
Part Number Development								
Sample Part Number	233-342	NF	00	-15	2	A	N	H
Basic Number	233-342							
Finish	See Material and Finish table							
Connector Style¹	See Connector Style table							
Shell Size	15							
USB Performance	2 = USB 2.0							
USB Interface Type	A = Type A							
Alternate Key Position¹	A, B, C, D, E, N = Normal; per MIL-DTL-38999							
USB Orientation	H = Horizontal V = Vertical							

USB Receptacle Orientation Options (Partial Views Shown)



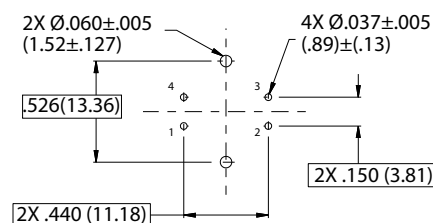
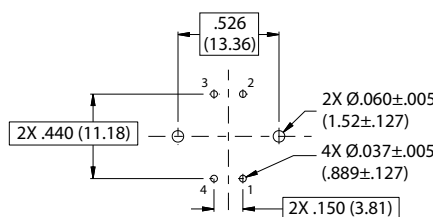
Horizontal

▼ = Master Keyway



Vertical

Recommended (Solder Side)



Material and Finish	
NF	Aluminum/Cadmium, Olive Drab
M	Aluminum/Electroless Nickel
MT	Aluminum/Nickel PTFE
ZR	Aluminum/Black Zinc-Nickel

Connector Style	
07	Rear panel mount, jam nut receptacle
00	Wall mount receptacle with slotted holes
D0	Wall mount receptacle with round holes
CM	Wall mount receptacle with metric clinch nuts

NOTES

- See Section A for alternate key/keyway positions and panel cutout dimensions
- Rear panel mount only
- Meets IP67 in unmated condition, IP68 mated
- Receptacle has USB female receptacle
- Material/Finishes:
 - Insulators: high grade rigid dielectric/ n.a.
 - Contacts: copper alloy, gold plated
 - Seals: silicone based elastomer
 - USB (shell/contacts): copper alloy
 - Dielectric: hi-temp thermoplastic PA9T UL94V-0
 - Hardware: stainless steel/passivated

USB 2.0 Wiring				
Pin	Name	Cable Color (USB)	Description	Recommended Wire Sizes (AWG)
1	(V Bus)	Red	+5 V	22
2	(D-)	White	Data -	28
3	(D+)	Green	Data +	28
4	(GND)	Black	Ground	22

All external dimensions, features, etc. compliant with D38999/20, /24, &/26. Consult factory for additional information.



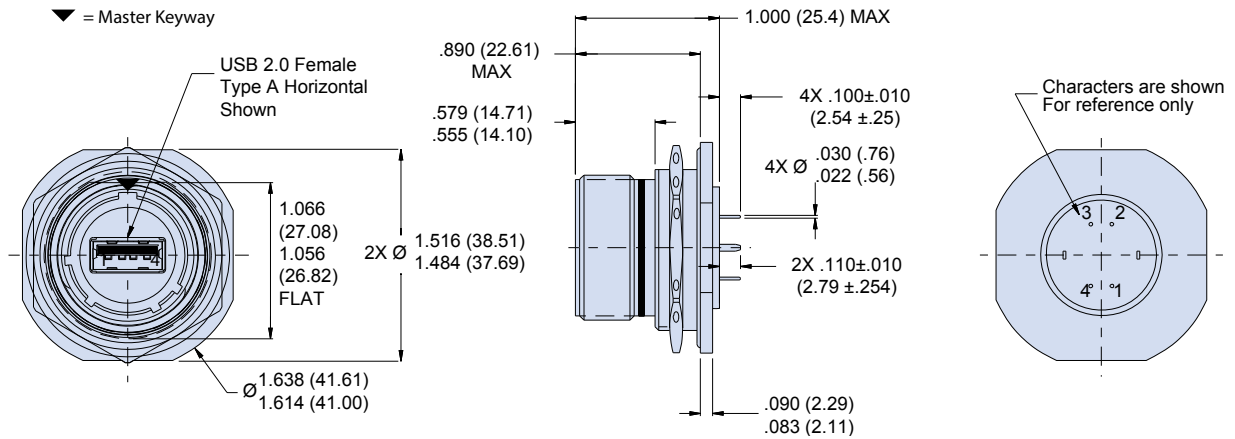
USB 2.0 TYPE A CONNECTORS

MIL-DTL-38999 Series III Type Connectors



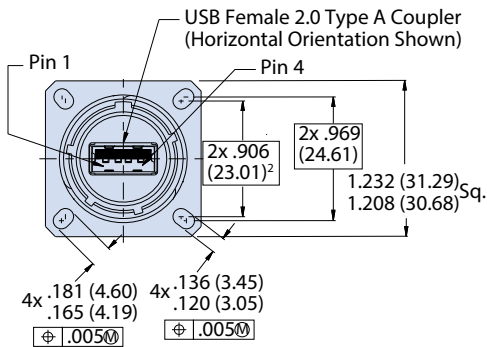
233-342 Receptacle with PC tails

07 - REAR PANEL MOUNT, JAM NUT RECEPTACLE

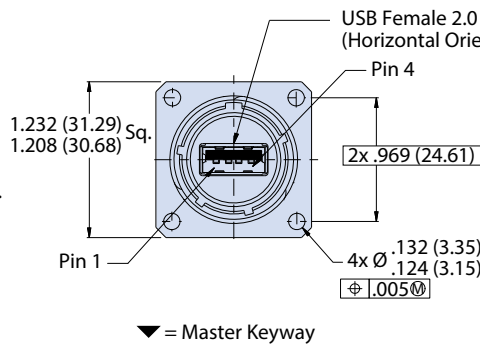


00, D0 AND CM - WALL MOUNT RECEPTACLES

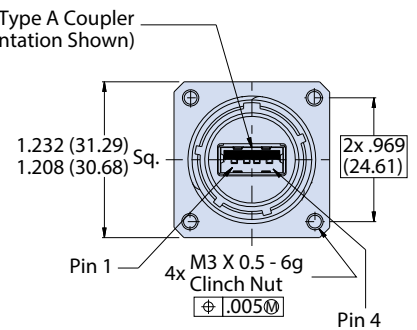
00 - Slotted Hole Receptacle Face View



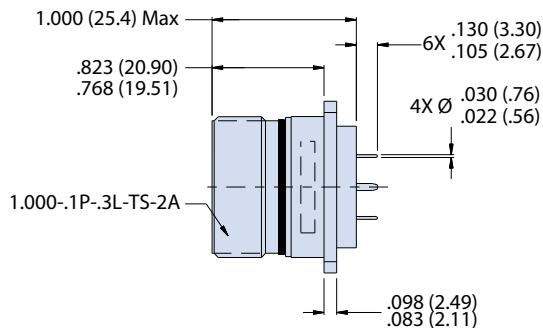
D0 - Round Hole Receptacle Face View



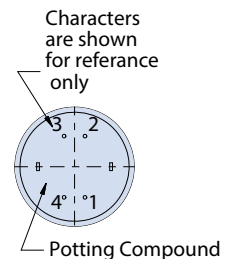
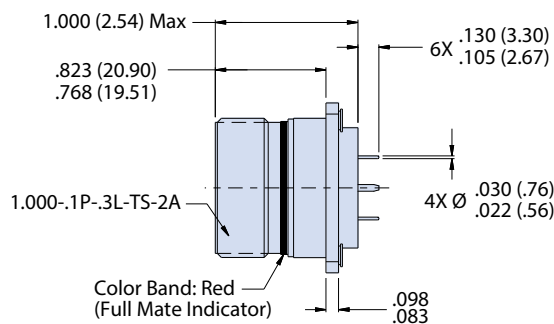
CM - Clinch Hole Receptacle Face View



00 and D0 - Receptacle (Side View)



CM - Receptacle (Side View)





USB 2.0 TYPE A CONNECTORS

MIL-DTL-38999 Series III Type Connectors



233-343 Receptacle with solder cup termination



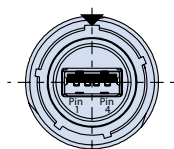
**Jam Nut Receptacle
Front View**



**Jam Nut Receptacle
Rear View**

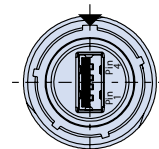
Part Number Development								
Sample Part Number	233-343	NF	00	-15	2	A	N	H
Basic Number	233-343							
Finish	See Material and Finish table							
Connector Style¹	See Connector Style table							
Shell Size	15							
USB Performance	2 = USB 2.0							
USB Interface Type	A = Type A							
Alternate Key Position¹	A, B, C, D, E, N = Normal; per MIL-DTL-38999							
USB Orientation	H = Horizontal V = Vertical							

USB Receptacle Orientation Options (Partial Views Shown)



Horizontal

▼ = Master Keyway



Vertical

Material and Finish	
NF	Aluminum/cadmium, olive drab
M	Aluminum/electroless nickel
MT	Aluminum/nickel PTFE
ZR	Aluminum/black zinc-nickel

Connector Style	
07	Rear panel mount, jam nut receptacle
00	Wall mount receptacle with slotted holes
D0	Wall mount receptacle with round holes
CM	Wall mount receptacle with metric clinch nuts

USB 2.0 Wiring				
Pin	Name	Cable Color (USB)	Description	Recommended Wire Sizes (AWG)
1	(V Bus)	Red	+5 V	22
2	(D-)	White	Data -	28
3	(D+)	Green	Data +	28
4	(GND)	Black	Ground	22

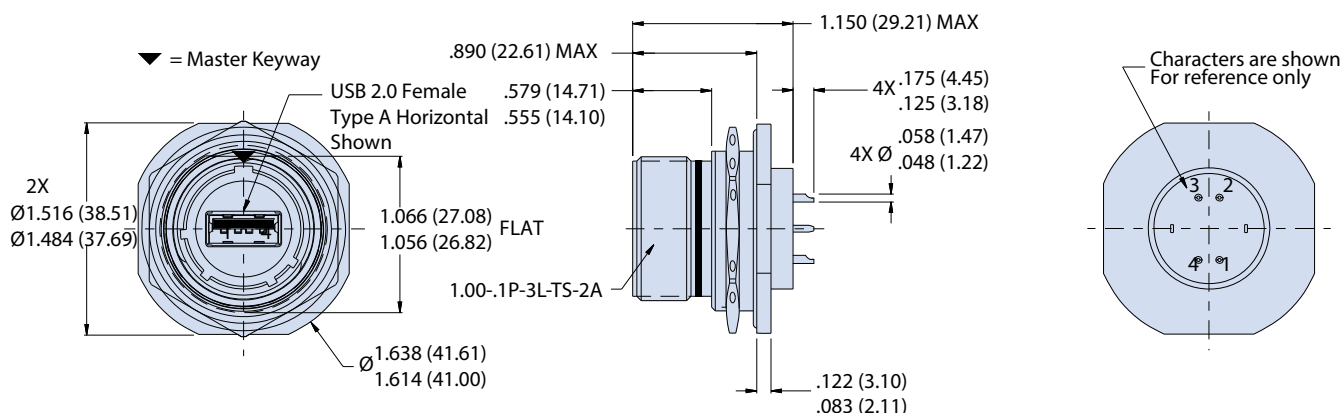
All external dimensions, features, etc. compliant with D38999/20, /24, &/26. Consult factory for additional information.

NOTES

- See Section A for alternate key/keyway positions and panel cutout dimensions
- Front panel mount only
- All external dimensions, features, etc. Compliant with D38999/20, /24 & /26. Consult factory for additional information
- Meets IP67 in unmated condition, IP68 mated
- Receptacle has USB female receptacle
- Materials and finishes
 - Shell, jam nut: aluminum ally
 - insulators: high grade 4 rigid dielectric/n.a.
 - contacts: copper alloy, gold plated
 - seals: silicone based elastomer
 - USB (shell/contacts: copper alloy
 - dielectric: hi-temp thermoplastic PA9T UL94V-0
 - Hardware: stainless steel/passivated

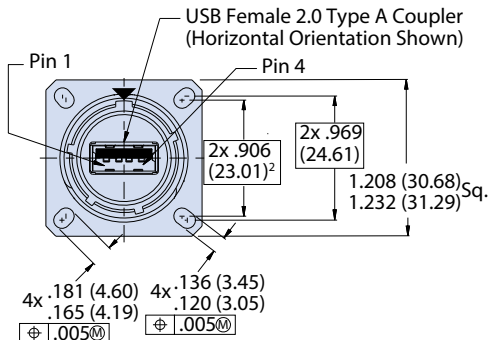
233-343 Receptacle with solder cup termination

07 - REAR PANEL MOUNT, JAM NUT RECEPTACLE

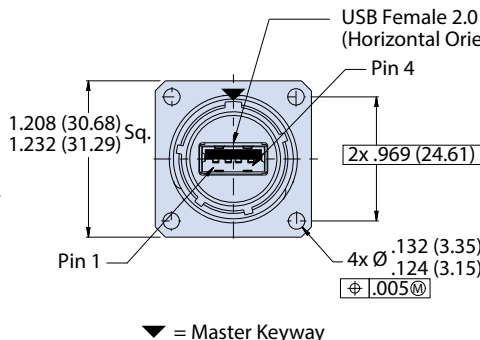


00, DO AND CM - WALL MOUNT RECEPTACLES

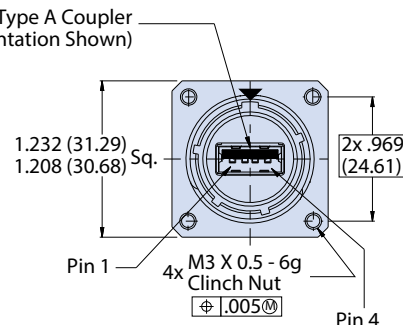
00 - Slotted Hole Receptacle Face View



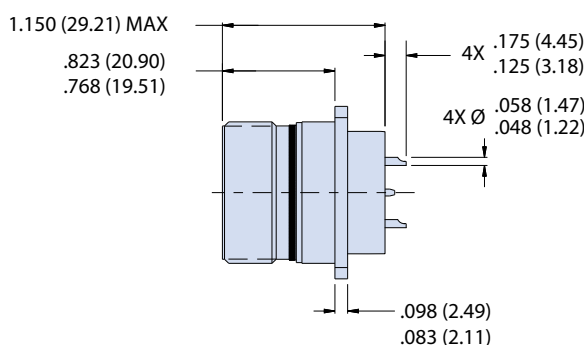
D0 - Round Hole Receptacle Face View



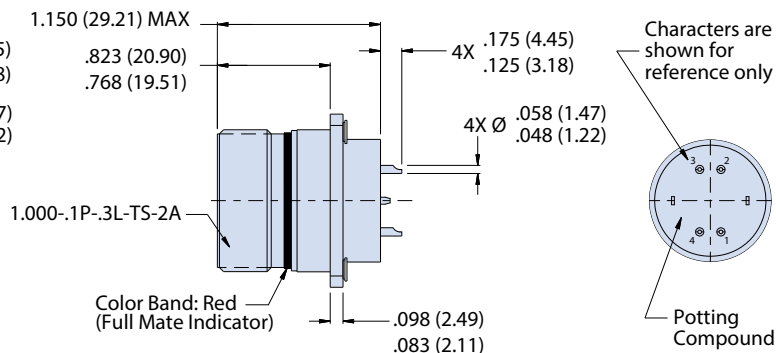
CM - Clinch Hole Receptacle Face View



00 and D0 - Receptacle Side View



CM - Receptacle Side View





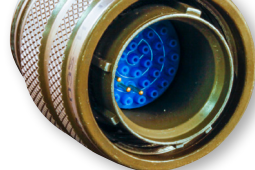
USB 2.0 TYPE A CONNECTORS

MIL-DTL-38999 Series III Type Connectors



233-344 Receptacle adapter with MIL-STD 1560 interface

Plug
Front View



Receptacle
Front View



Material and Finish

NF	Aluminum/cadmium, olive drab
M	Aluminum/electroless nickel
MT	Aluminum/nickel PTFE
ZR	Aluminum/black zinc-nickel

Connector Style

G6	Plug
07	Rear panel mount, jam nut receptacle
00	Wall mount receptacle with slotted holes ²
D0	Wall mount receptacle with round holes
CM	Wall mount receptacle with metric clinch nuts

NOTES

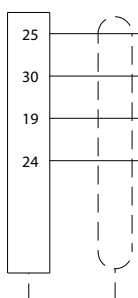
1. See Section A for alternate key/keyway positions and panel cutout dimensions
2. Front panel mount only
3. Insert arrangement in accordance with MIL-STD-1560, 15-35. Contact factory for additional options
4. Meets IP67 in unmated condition, IP68 mated
5. For custom pin assignment consult factory
6. Both plug and receptacle shells have MIL-STD-1560 mating interface and rear USB female receptacles

Part Number Development

Sample Part Number	233-344	NF	00	15	-35	2	A	P	N	T
Basic Number	233-344									
Finish	See Material and Finish table									
Connector Style ¹	See Connector Style table									
Shell Size	15									
Insert Arrangement ⁴	35 = IAW MIL-STD-1560, 15-35									
USB Performance	2 = USB 2.0									
USB Rear Interface	A = Type A									
Contact Style	P = Pin S = Socket									
Alternate Polarization ¹	A, B, C, D, E, N = Normal; per MIL-DTL-38999									
Shrink Boot	T = Shrink Boot; Omit for none									

USB 2.0 Wiring Diagram

P1 (connector interface)
Only 4 pins needed



P2 (USB 2.0 FEMALE)

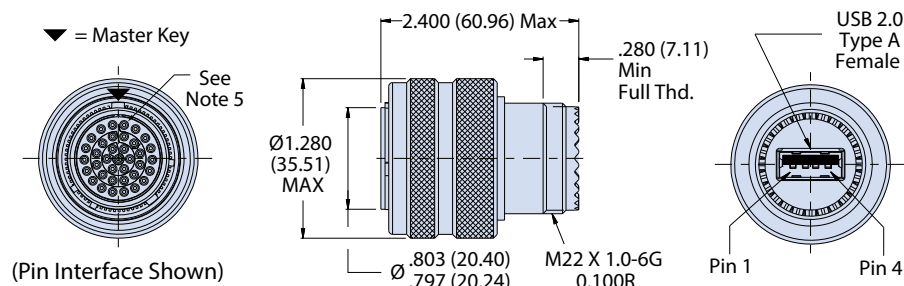
PIN	NAME	DESCRIPTION
1	V-BUS	+5 V
2	D-	DATA-
3	D+	DATA+
4	GND	GROUND

All external dimensions, features, etc. compliant with D38999/20, /24, & /26. Consult factory for additional information.

USB 2.0 Wiring

Pin	Name	Cable Color (USB)	Description	Recommended Wire Sizes (AWG)
1	(V Bus)	Red	+5 V	22
2	(D-)	White	Data -	28
3	(D+)	Green	Data +	28
4	(GND)	Black	Ground	22

G6 PLUG WITH ACCESSORY THREADS





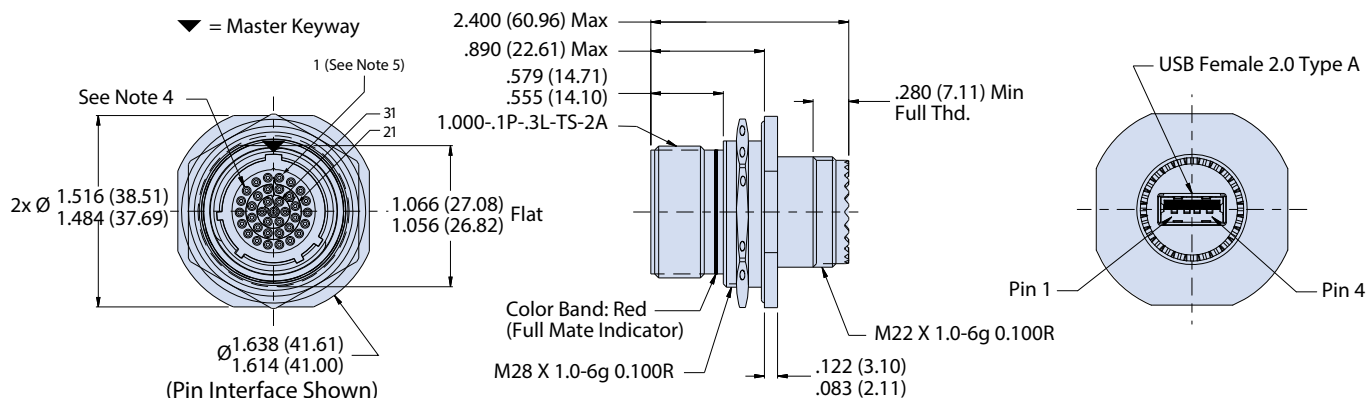
USB 2.0 TYPE A CONNECTORS

MIL-DTL-38999 Series III Type Connectors



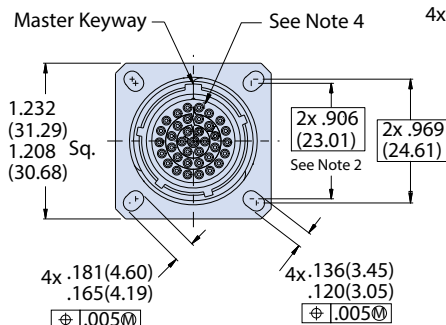
233-344 Receptacle adapter with MIL-STD 1560 interface

07 - REAR PANEL MOUNT, JAM NUT RECEPTACLE WITH ACCESSORY THREADS

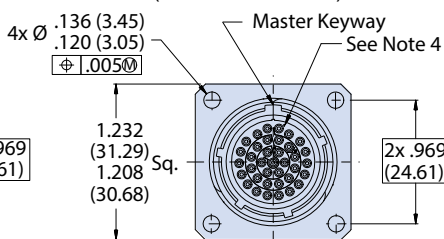


00, D0 AND CM - WALL MOUNT RECEPTACLES WITH ACCESSORY THREADS

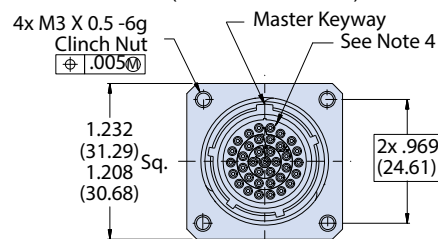
00 - Slotted Hole Receptacle (Mating Face) (Pin Interface Shown)



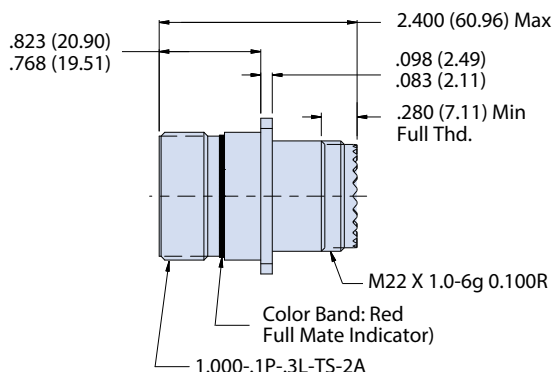
D0 - Round Hole Receptacle (Mating Face) (Pin Interface Shown)



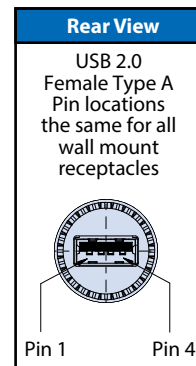
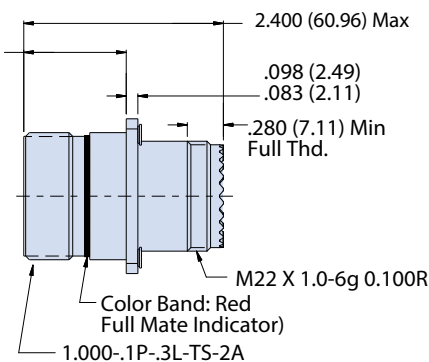
CM - Clinch Hole Receptacle (Mating Face) (Pin Interface Shown)



00 and D0 - Receptacle (Side View)



CM - Receptacle (Side View)





USB 2.0 TYPE A CONNECTORS

MIL-DTL-38999 Series III Type Connectors



233-345 Receptacle with crimp removable contacts



Receptacle
Front View

Receptacle
Rear View



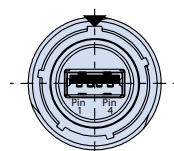
Material and Finish	
NF	Aluminum/cadmium, olive drab
M	Aluminum/electroless nickel
MT	Aluminum/nickel PTFE
ZR	Aluminum/black zinc-nickel

Connector Style	
G6	Plug
07	Rear panel mount, jam nut receptacle
00	Wall mount receptacle with slotted holes
D0	Wall mount receptacle with round holes
CM	Wall mount receptacle with metric clinch nuts

USB 2.0 Wiring				
Pin	Name	Cable Color (USB)	Description	Recommended Wire Sizes (AWG)
1	(V Bus)	Red	+5 V	22
2	(D-)	White	Data -	28
3	(D+)	Green	Data +	28
4	(GND)	Black	Ground	22

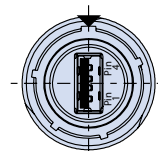
Part Number Development									
Sample Part Number	233-345	NF	00	-15	2	A	N	H	T
Basic Number	233-345								
Finish	See Material and Finish table								
Connector Style ¹	See Connector Style table								
Shell Size	15								
USB Performance	2 = USB 2.0								
USB Interface Type	A = Type A								
Alternate Polarization ¹	A, B, C, D, E, N = Normal; per MIL-DTL-38999								
USB Orientation	H = Horizontal V = Vertical								
Shrink Boot	T = Shrink Boot; Omit for none								

USB Receptacle Orientation Options (Partial Views Shown)



Horizontal

▼ = Master Keyway



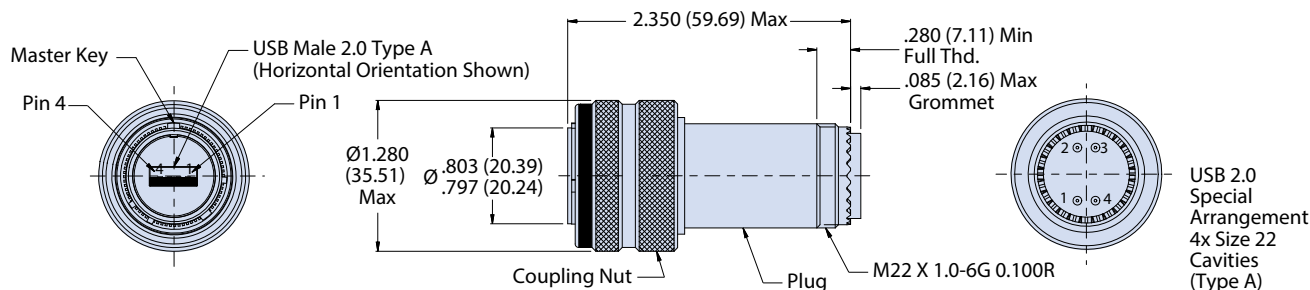
Vertical

NOTES

1. See Section A for alternate key/keyway positions and panel cutout dimensions
2. Front panel mount only
3. Crimp removable size 22 socket contacts (M39029/56-348) supplied loose
4. Meets IP67 in unmated condition, IP68 mated
5. Receptacle has USB female receptacle mating interface

All external dimensions, features, etc. compliant with D38999/20, /24, &/26. Consult factory for additional information.

G6 PLUG WITH ACCESSORY THREADS





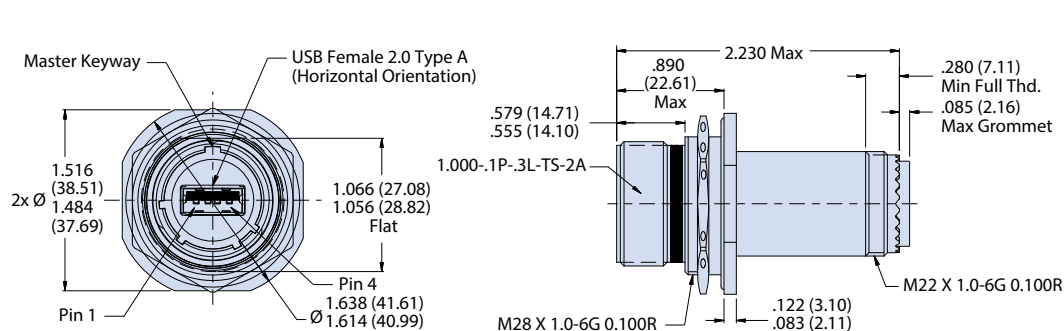
USB 2.0 TYPE A CONNECTORS

MIL-DTL-38999 Series III Type Connectors

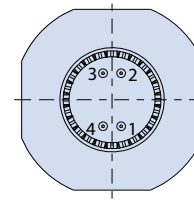


233-345 Receptacle with crimp removable contacts

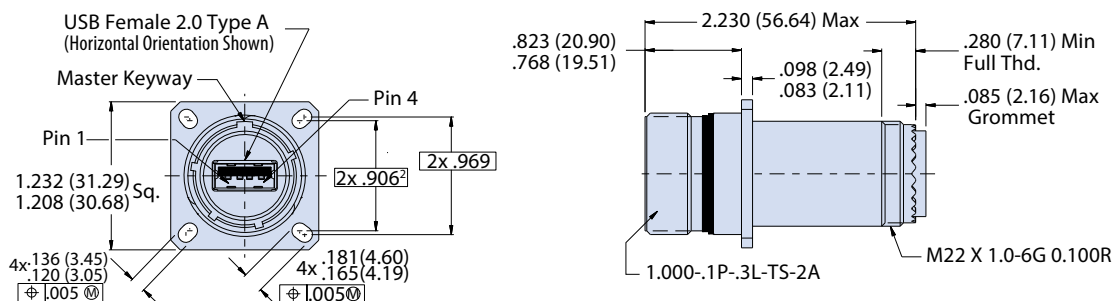
07 - REAR PANEL MOUNT, JAM NUT RECEPTACLE WITH ACCESSORY THREADS



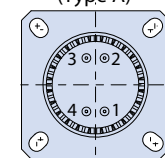
USB 2.0
Special Arrangement
4x Size 22 Cavities
(Type A)



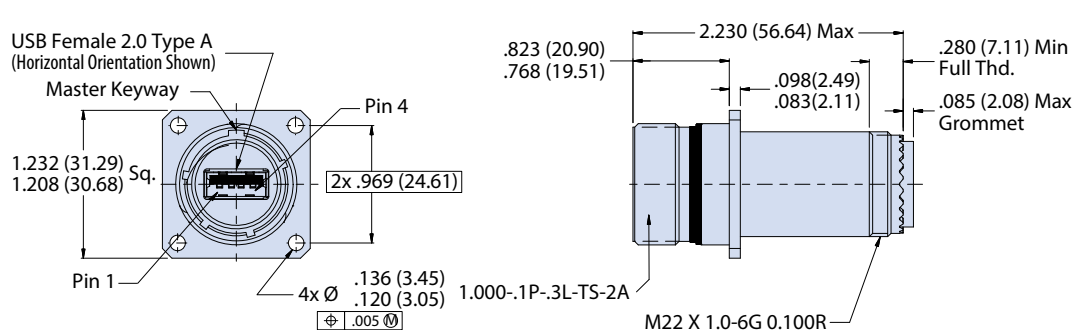
00 WALL MOUNT RECEPTACLE WITH ACCESSORY THREADS



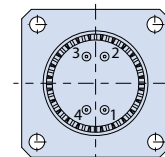
USB 2.0 Special
Arrangement
4x Size 22 Cavities
(Type A)



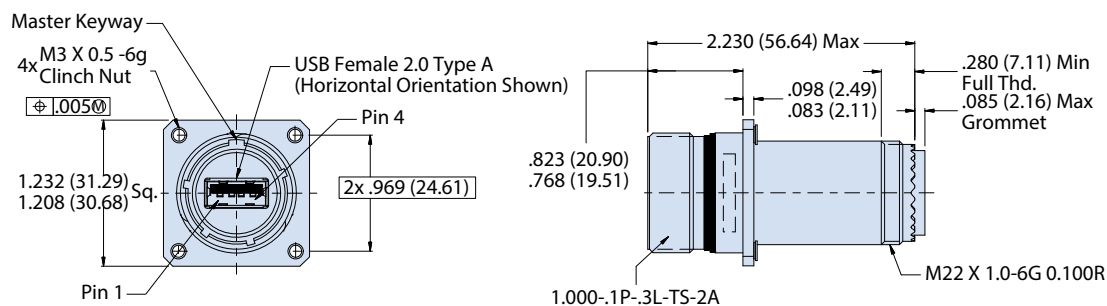
DO - WALL MOUNT RECEPTACLES WITH ACCESSORY THREADS



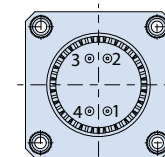
USB 2.0
Special Arrangement
4x Size 22 Cavities
(Type A)



CM - WALL MOUNT RECEPTACLES WITH ACCESSORY THREADS



USB 2.0
Special Arrangement
4x Size 22 Cavities
(Type A)





USB 2.0 TYPE A CONNECTORS

MIL-DTL-38999 Series III Type Connectors



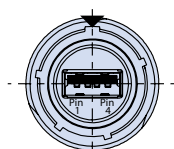
233-370 Feed-through receptacle



Feed-through
Front View

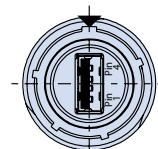
Part Number Development									
Sample Part Number	233-370	NF	00	-17	2	A	A	N	H
Basic Number	233-370								
Finish	See Material and Finish table								
Connector Style ¹	See Connector Style table								
Shell Size	15 or 17								
USB Performance	2 = USB 2.0								
USB Front Interface	A = Type A								
USB Rear Interface	A = Type A								
Alternate Polarization ¹	A, B, C, D, E, N = Normal								
USB Orientation	H = Horizontal V = Vertical								

USB Receptacle Orientation Options (Partial Views Shown)



Horizontal

▼ = Master Keyway



Vertical

Material and Finish

NF	Aluminum/cadmium, olive drab
M	Aluminum/electroless nickel
MT	Aluminum/nickel PTFE
ZR	Aluminum/black zinc-nickel

Connector Style

07	Rear panel mount, jam nut receptacle
00	Wall mount receptacle with slotted holes ²
DO	Wall mount receptacle with round holes
CM	Wall mount receptacle with metric clinch nuts

USB 2.0 Wiring

Pin	Name	Cable Color (USB)	Description	Recommended Wire Sizes (AWG)
1	(V Bus)	Red	+5 V	22
2	(D-)	White	Data -	28
3	(D+)	Green	Data +	28
4	(GND)	Black	Ground	22

NOTES

1. See Section A for alternate key/keyway positions and panel cutout dimensions
2. Front panel mount only
3. Meets IP67 in unmated condition, IP68 mated
4. Feedthru has front and rear USB female mating interface

Jam Nut Mount

Shell Size	Ø H		J		K Flat		L Thread
	in	mm	in	mm	in	mm	
15	1.638	41.61	1.516	38.51	1.066	27.08	M28 X 1.0-6G 0.100R
	1.614	41.00	1.484	37.69	1.056	26.82	
17	1.764	44.81	1.642	41.71	1.191	30.25	M32 X 1.0-6G 0.100R ⁴
	1.740	44.20	1.610	40.89	1.181	30.00	

Wall Mount

Shell Size	A Thread		B Sq		C Bsc		D Bsc ²		E		F		Ø G Holes	
	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm
15	1.0000-.1P-.3L-TS-2A	1.232 1.208	31.29 30.68	.969	24.61	.906	23.01	.136 0.120	3.45 3.05	0.181 0.165	4.60 4.19	0.136 0.120	3.45 3.05	
17	1.1875-.1P-.3L-TS-2A	1.323 1.299	33.60 32.99	1.062	26.97	.969	24.61							



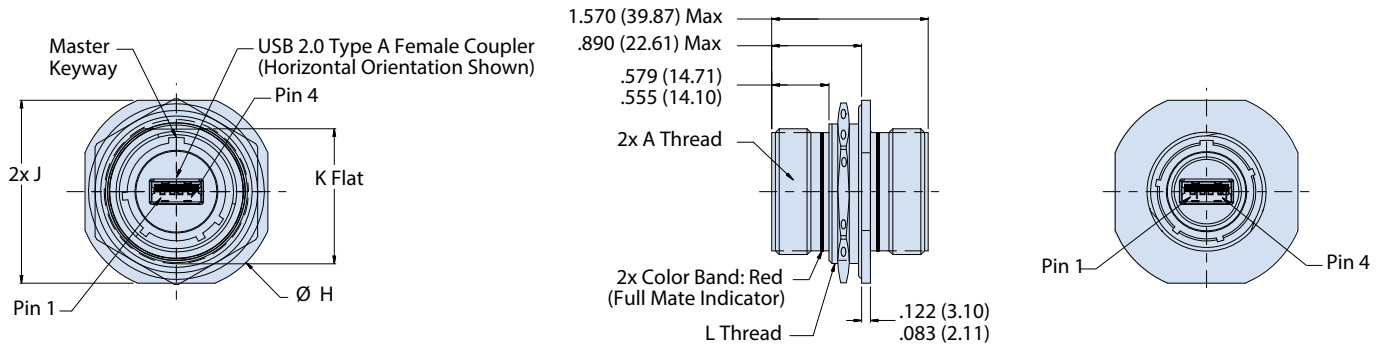
USB 2.0 TYPE A CONNECTORS

MIL-DTL-38999 Series III Type Connectors



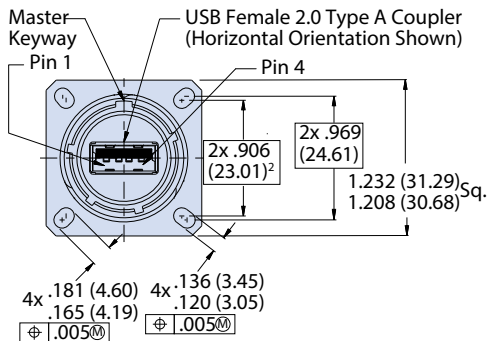
233-370 Feed-through receptacle

07 - REAR PANEL MOUNT, JAM NUT RECEPTACLE

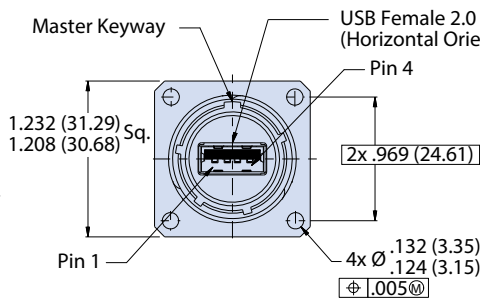


00, D0 AND CM - WALL MOUNT RECEPTACLES

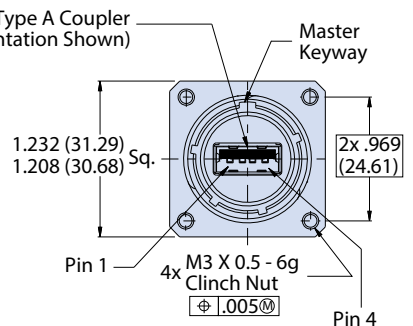
00 - Slotted Hole Receptacle Face View



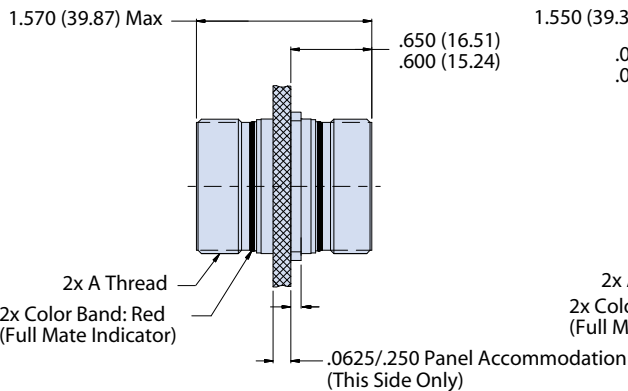
D0 - Round Hole Receptacle Face View



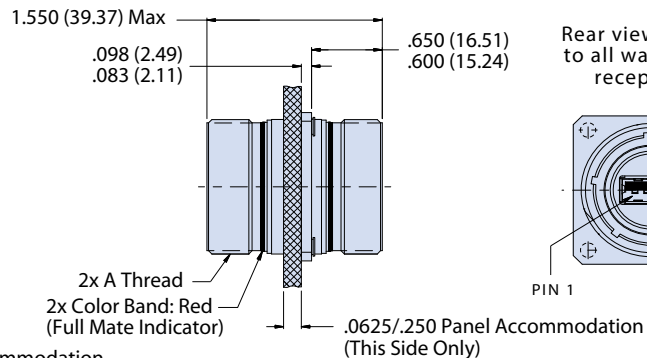
CM - Clinch Hole Receptacle Face View



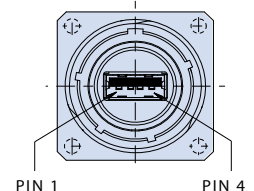
00 and D0 - Receptacle Side View



CM - Receptacle Side View



Rear view applies to all wall mount receptacles



All external dimensions, features, etc. compliant with D38999/20, /24, &/26. Consult factory for additional information.



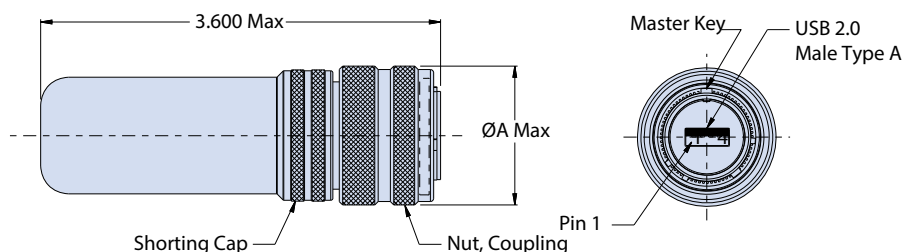
USB 2.0 TYPE A CONNECTORS

MIL-DTL-38999 Series III Type Connectors



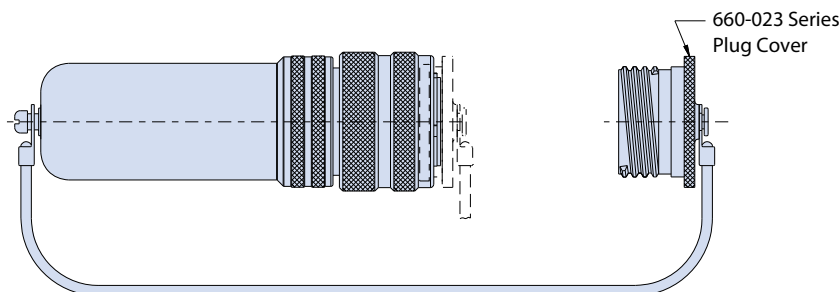
233-390 USB 2.0 Memory stick

Part Number Development						
Sample Part Number	233-390	NF	32	-15	N	H P
Series / Basic Part No.	233-390					
Finish	NF = Aluminum/cadmium olive drab ME = Aluminum/electroless nickel MT = Aluminum/nickel PTFE ZR = Aluminum/zinc-nickel					
Storage Capacity Options	128 = 128Gb 64 = 64Gb 32 = 32 Gb, 16 = 16 Gb, 8 = 8Gb					
Shell Size	15, 17, 19, 21, 23, 25					
Alternate Key Position	A, B, C, D, E, N = Normal; Per MIL-DTL-38999					
USB Orientation	H = Horizontal V = Vertical					
Protective Cover Option	P = Series 660-023 cover (omit for none)					



View shown with Protective Cap

Dimensions	
Shell Size	ØA Max
15	1.280 (32.5)
17	1.406 (35.7)
19	1.516 (38.5)
21	1.642 (41.7)
23	1.768 (44.9)
25	1.890 (48.0)



NOTES

- System requirements: Windows 2000, XP, Vista, Windows 7.
- Compatibility: plug and play; USB 2.0 Compliance.
- Interface: USB 2.0, Type A male.
- Data transfer rates: USB 2.0: Up to 25 Mb/sec read, 10Mb/sec write.
- Password protection and AES encryption.
- Mates with 233-340,-341,-342,-343 & -345
- Environmental parameters:
Operating temperatures: -40°C to 85°C (see part number development)
- Storage temperatures: -40°C to 85°C
- Humidity range operating: 10% to 95%
- Memory stick uses USB male plug
- Material/Finish
 - Barrel, coupling nut:
 - Insulators: high grade rigid dielectric/ N.A.
 - Seal: fluorosilicone/N.A.
 - EMI grounding spring: BeCu /electroless nickel plate.
 - Hardware: stainless steel/passivated



USB 2.0 TYPE A CONNECTORS

MIL-DTL-38999 Series III Type Connectors



2330-0069 USB 2.0 Cable assembly



2330-0069 Glenair SuperSeal™ USB 2.0 cable jumpers, with SuperNine® connectors to standard USB Type A plug

SuperSeal USB connectors are IP67 open face rated and IP68 in the mated condition for complete protection in harsh environments. SuperSeal connector styles include plug, wall mount and jam-nut receptacles. Wall mount receptacles are available with slotted holes and straight cable exit. USB 2.0 can be ordered in horizontal or vertical orientation to provide further security against mis-mating and conform to existing USB orientations. Please consult factory for custom configurations.

All external dimensions, features, etc. compliant with D38999/20, /24, &/26. Consult factory for additional information.

Material and Finish	
NF	Aluminum/cadmium, olive drab
ME	Aluminum/electroless nickel
ZR	Zinc nickel, black (tri-valent chromium) RoHS compliant
XM	Composite/electroless nickel
ZI	Stainless steel / passivate
AB	Marine bronze/none

Part Number Development							
Sample Part Number	2330-0069	M	07	N	H	A	-XX
Basic Number	2330-0069						
P1 Finish	See Material and Finish table						
P1 Connector Style	07 = Receptacle, Jam Nut 00 = Square Flange w/ Slotted Holes D0 = Square Flange with Round Holes G6 = Plug						
Polarization	A, B, C, D, E, N = Normal						
P1 USB 2.0 Orientation	H = Horizontal V = Vertical						
P2 Connector Style	A = USB 2.0 Type A plug B = USB 2.0 Type B plug						
Overall Length	12 = 12 inches 24 = 24 inches XX = XX inches (197 Inches max.)						

NOTES

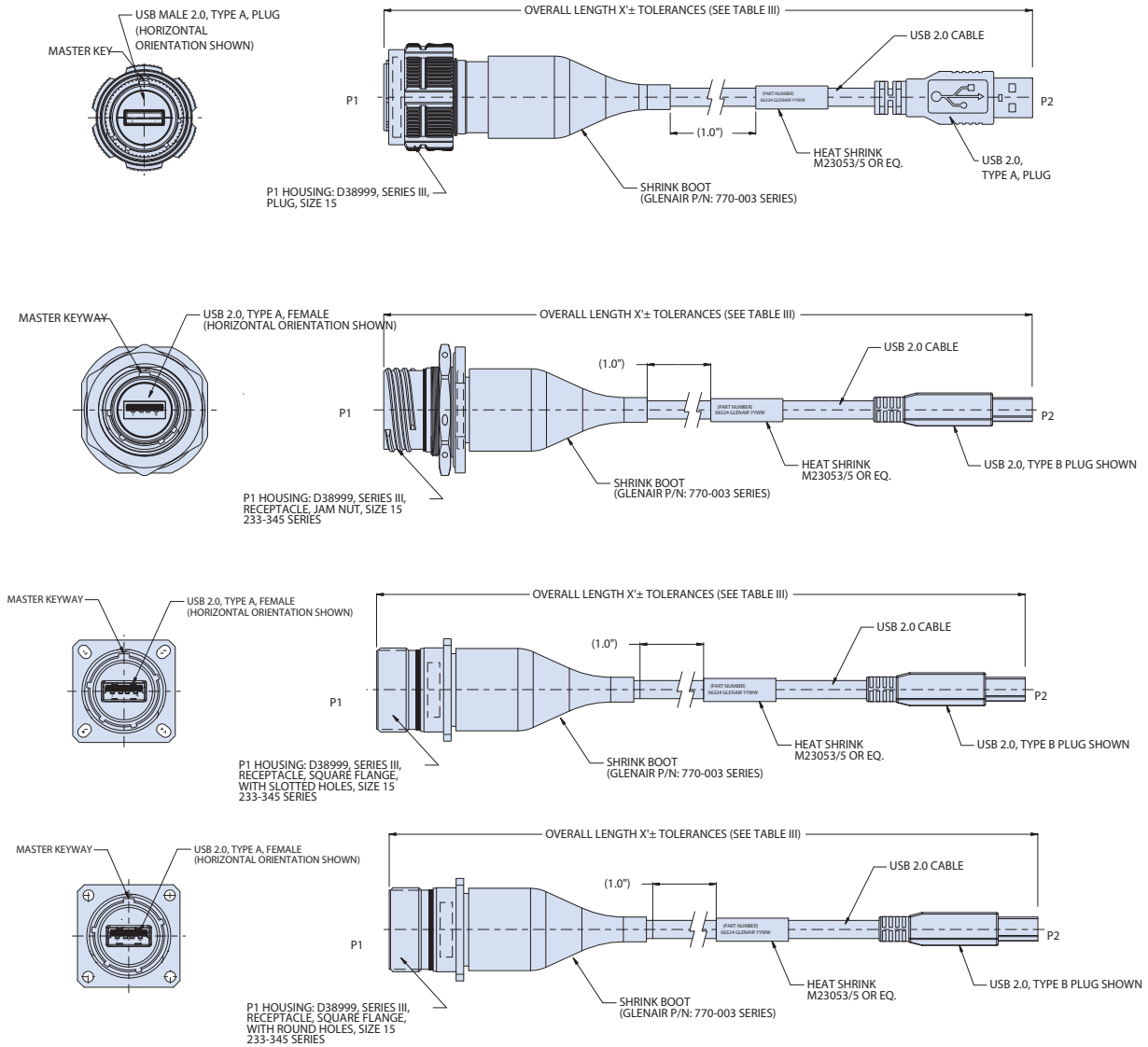
1. Interpret drawing per ASME Y14.5 - 2009
2. USB 2.0 Electrical specifications:
DWV 500 VAC
I.R. 100 Megohms min.
3. Meets IP67 in unmated condition, IP68 mated
4. Cable assembly to be tested 100% for electrical shorts, continuity, IR, and DWV.
100% functional USB testing per ATP-555



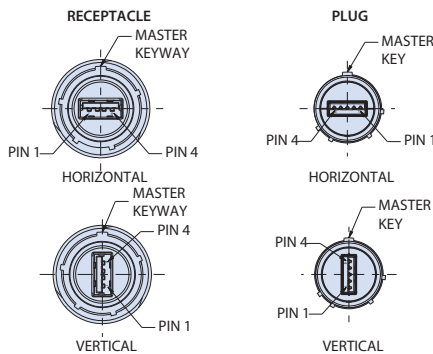
USB 2.0 TYPE A CONNECTORS

MIL-DTL-38999 Series III Type Connectors

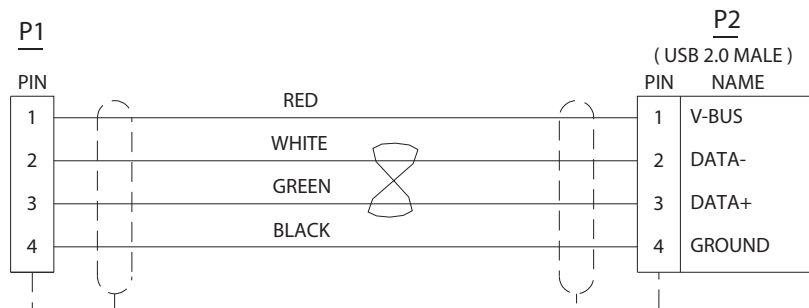
2330-0069 USB 2.0 Cable assembly



USB 2.0 ORIENTATION OPTIONS (P1)
(PARTIAL FRONT VIEWS SHOWN)



WIRING DIAGRAM





USB 2.0 TYPE A CONNECTORS

MIL-DTL-38999 Series III Type Connectors



2330-0015 USB 2.0 Cable assembly



2330-0015 Glenair SuperSeal™ USB 2.0 cable jumpers, with SuperNine® connectors to standard USB Type A plug

SuperSeal USB connectors are IP67 open face rated and IP68 in the mated condition for complete protection in harsh environments. SuperSeal connector styles include plug, wall mount and jam-nut receptacles. Wall mount receptacles are available with slotted holes and straight cable exit. USB 2.0 can be ordered in horizontal or vertical orientation to provide further security against mis-mating and conform to existing USB orientations. Please consult factory for custom configurations.

All external dimensions, features, etc. compliant with D38999/20, /24, &/26. Consult factory for additional information.

Material and Finish

NF	Aluminum/cadmium, olive drab
ME	Aluminum/electroless nickel
ZR	Zinc nickel, black (tri-valent chromium) RoHS compliant

Connector Style

G6	Plug
07	Rear panel mount, jam nut receptacle
00	Wall mount receptacle with slotted holes ²
CM	Receptacle, wall mount, with metric clinch nuts
D0	Receptacle, wall mount, with slotted holes

NOTES

- See Section A for panel cutout dimensions
- Meets IP67 in unmated condition, IP68 mated
- Standard configurations provided with potted back end
- SuperSeal plug houses USB plug. Superseal receptacle houses USB receptacle

Part Number Development

Sample Part Number	2330-0015	NF	D0	S	-15	2	A	N	H	A	S	-03
Basic Number	2330-0015											
P1 Finish	See Material and Finish table											
P1 Connector Style ¹	See Connector Style table											
P1 Cable Exit	S = Straight											
Shell Size	15											
USB Performance	2 = USB 2.0											
USB Interface	A = Type A											
Polarization	A, B, C, D, E, N = Normal											
USB Orientation	H = Horizontal V = Vertical											
P2 Connector Style	A - Type A USB plug Omit = Flying leads											
P2 Cable Exit	S = Straight Omit = Flying leads											
Standard Lengths	See Table I											

For custom configurations please consult factory.

TABLE I: Overall Length Tolerances

Dash No.	Overall Length (Feet)	Tolerances
01	1.0	+1"/-0
02	2.0	+2"/-0
03	3.0	
04	5.0	
05	7.0	+4"/-0
06	10.0	
07	15.0	+6"/-0



USB 2.0 TYPE A CONNECTORS

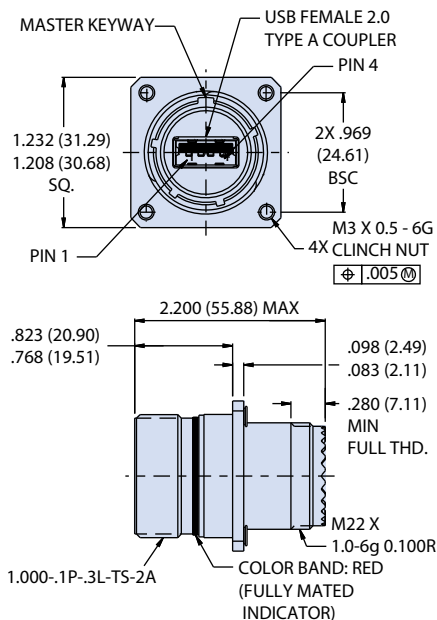
MIL-DTL-38999 Series III Type Connectors



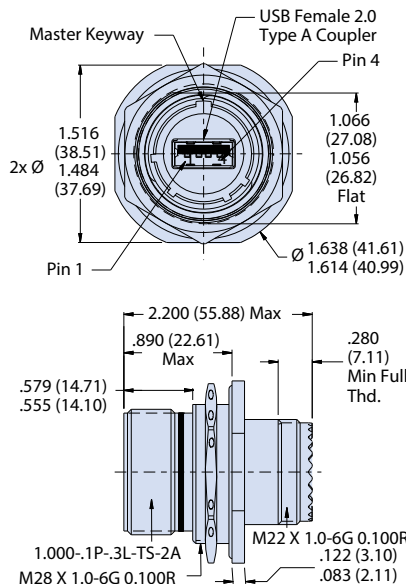
2330-0015 USB 2.0 Cable assembly

AVAILABLE P1 CONNECTOR DIMENSIONS, SHELL SIZE 15

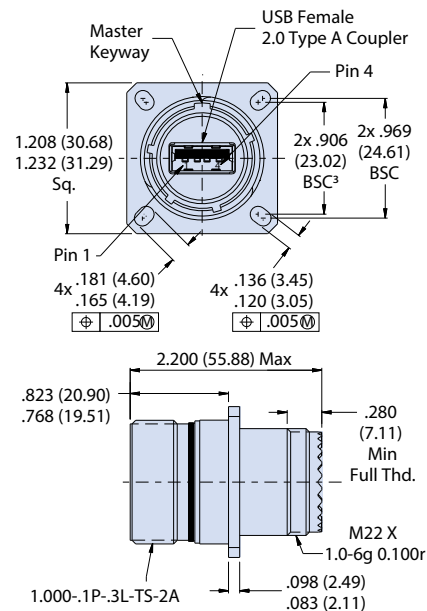
CM - Wall Mount Receptacle with Metric Clinch Nuts



07 Receptacle, Jam-Nut Mount

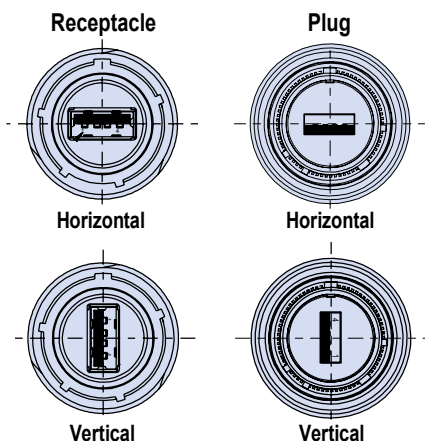


00 Receptacle, Wall Mount with Slotted Holes

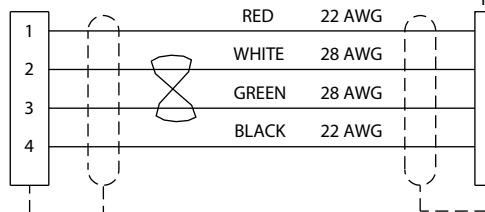


WIRING DIAGRAM

USB Orientation Options (Partial Views Shown)



P1 (D38999 CONNECTOR INTERFACE)



P2 (USB 2.0 TYPE A MALE)

PIN	NAME	DESCRIPTION
1	V-BUS	+5 V
2	D-	DATA-
3	D+	DATA+
4	GND	GROUND



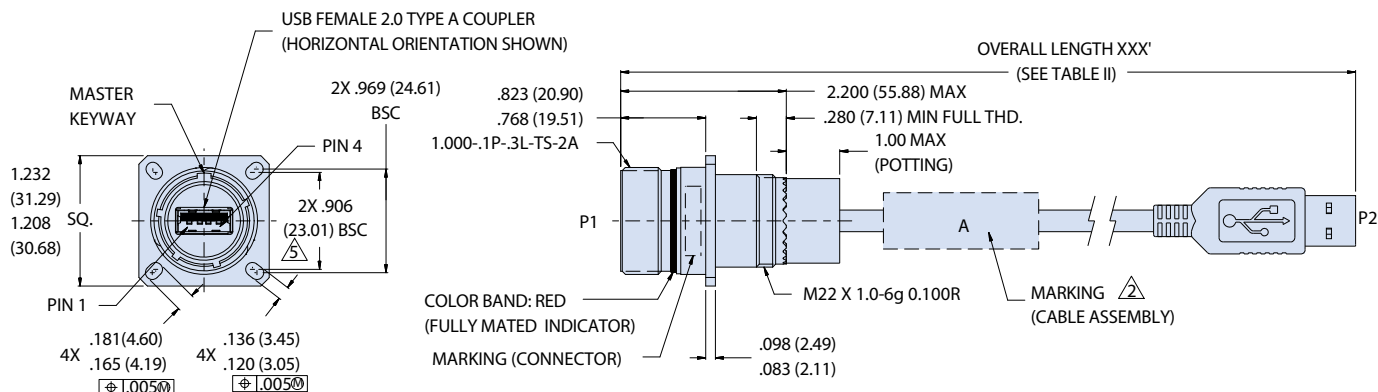
USB 2.0 TYPE A CONNECTORS

MIL-DTL-38999 Series III Type Connectors

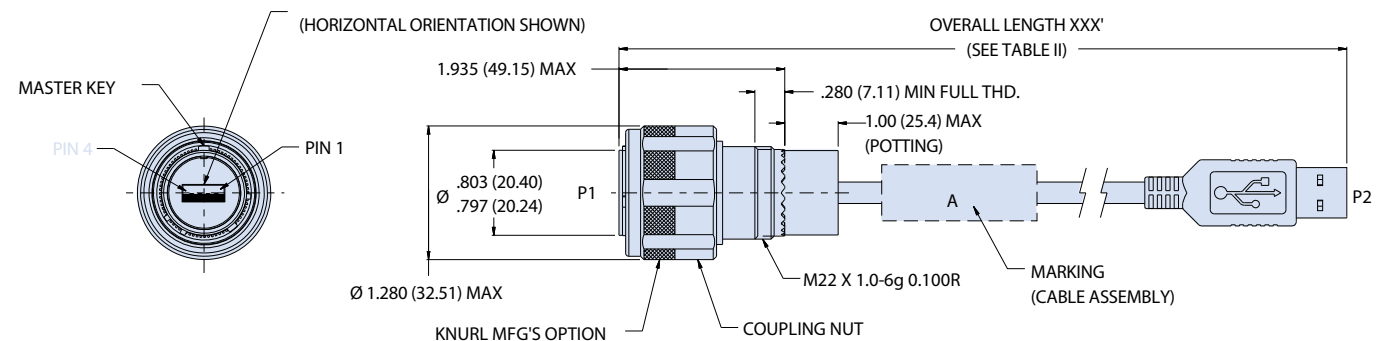


2330-0015 USB 2.0 Cable assembly

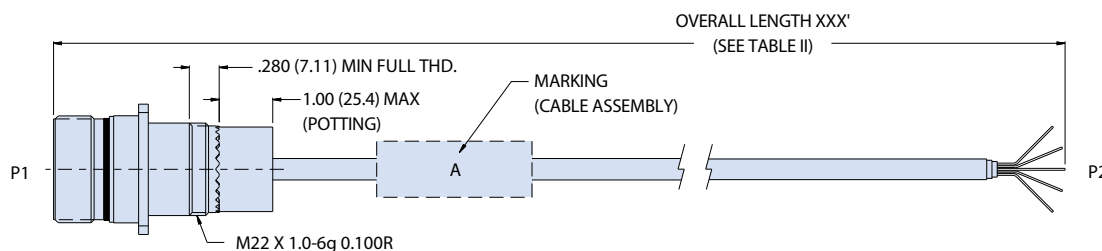
00 WALL MOUNT RECEPTACLE WITH SLOTTED HOLES (STRAIGHT STYLE SHOWN)



G6 PLUG (STRAIGHT STYLE SHOWN)



00, D0, CM, 07 RECEPTACLE & G6 PLUG (FLYING LEADS SHOWN)





USB 3.0 TYPE A CONNECTORS

MIL-DTL-38999 Series III Type Connectors



Product Selection Guide



233-350

C-22

SuperSeal™ Panel Mount USB 3.0 Receptacle Connectors



233-355

C-32

SuperSeal USB 3.0 Female-to-Female Feed-thru Coupler



233-352

C-24

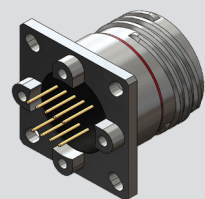
SuperSeal Receptacle with USB 3.0 Female Interface to PC Tail Termination



233-358

C-34

SuperSeal Plug Adapter for USB 3.0 Terminated Cordset



233-357

C-26

SuperSeal Panel Mount Receptacles with USB 3.0 to PC Tail Termination and Threaded Standoff



2330-0445

C-35

SuperSeal USB 3.0 Cable Assembly



233-353

C-28

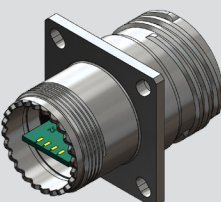
SuperSeal Receptacle with USB 3.0 Female Interface to Solder Cup Termination



2330-0445

C-37

SuperSeal USB 3.0 Cable Assembly with active repeater



233-354

C-30

SuperSeal Panel Mount Receptacles with USB 3.0 to Breakout Board Termination and Accessory Threads



233-92

C-38

SuperSeal USB 3.0 Memory Stick



USB 3.0 TYPE A CONNECTORS

MIL-DTL-38999 Series III Type Connectors



233-350 Panel mount receptacle couplers
with accessory threads



Part Number Development								
Sample Part Number	233-350	NF	00	-15	3	A	N	H
Basic Number	233-350							
Finish	See Material and Finish table							
Connector Style ¹	See Connector Style table							
Shell Size	15							
USB Performance	3 = USB 3.0							
USB Interface (Front and Back)	A = Type A							
Alternate Key Position ¹	A, B, C, D, E, N = Normal per MIL-DTL-38999							
USB Orientation	H = Horizontal V = Vertical							
Shrink Boot	T = Part No. 770-028 (Omit for None)							

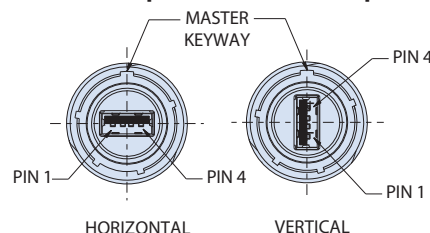
Material and Finish	
NF	Aluminum/Cadmium, Olive Drab
ME	Aluminum/Electroless Nickel
MT	Aluminum/Nickel PTFE
ZR	Aluminum/Black Zinc-Nickel
AB	Marine Bronze
XM	Composite/Electroless Nickel

Additional material / finish options available
consult factory

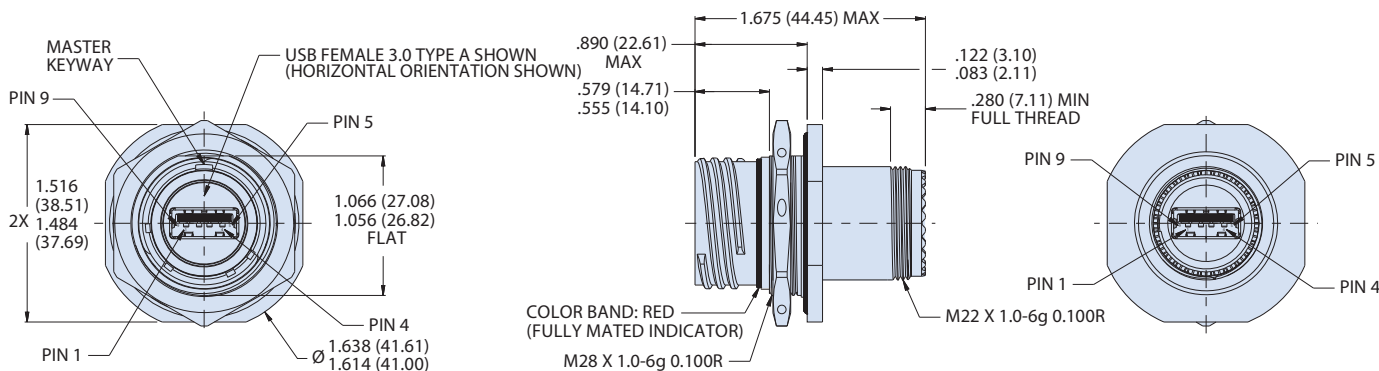
Connector Style	
07	Rear panel mount, jam nut receptacle
00	Wall mount receptacle with slotted holes
D0	Wall mount receptacle with thru-holes
CM	Wall mount receptacle with metric clinch nuts

All external dimensions, features, etc.
compliant with D38999/20, /24, &/26.
Consult factory for additional information.

USB Receptacle Orientation Options



07 - REAR PANEL MOUNT, JAM NUT RECEPTACLE

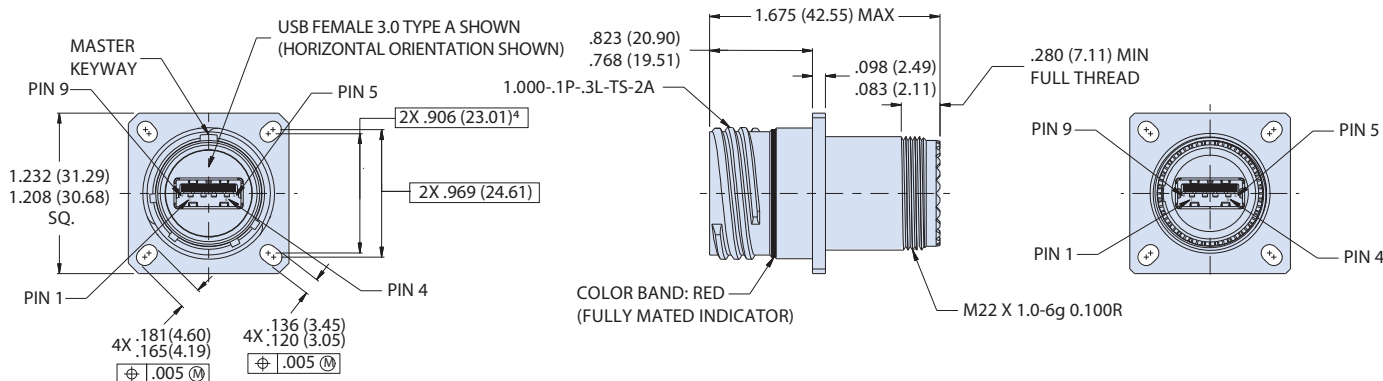


NOTES

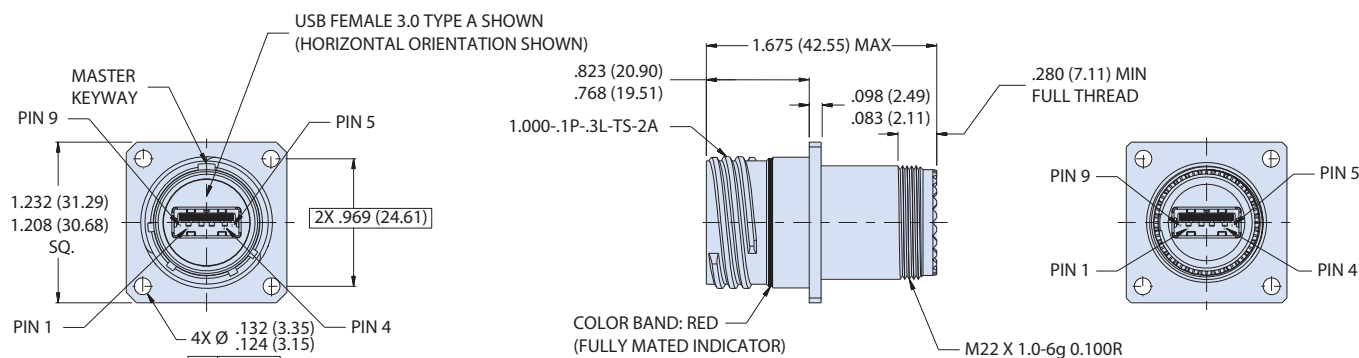
- See Section A for alternate key/keyway positions and panel cutout dimensions
- Meets IP67 in unmated condition, IP68 mated
- USB female port, front and back
- Front panel mount only
- Material and Finish
 - Shell, jam nut: al alloy
 - Insulators: high grade rigid dielectric/n.a.
 - Contacts: copper alloy, gold plated
 - Seals: silicone based elastomer
- USB (shell/contacts): copper alloy
- Dielectric: hi-temp thermoplastic PA9T UL94V-0
- Hardware: stainless steel /passivated

233-350 Panel mount receptacle couplers with accessory threads

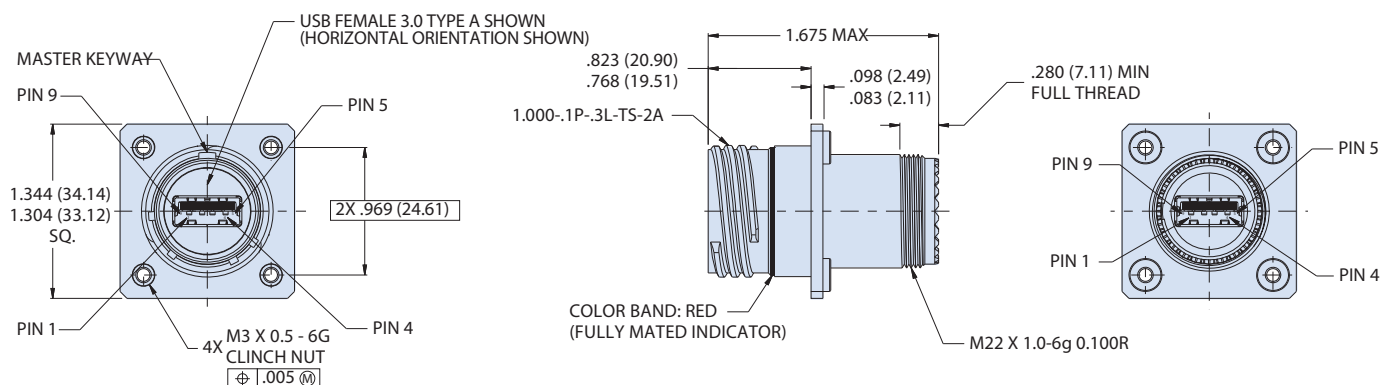
00 - WALL MOUNT RECEPTACLE WITH SLOTTED THRU-HOLES



DO - WALL MOUNT RECEPTACLE WITH ROUND THRU-HOLES



CM - WALL MOUNT RECEPTACLE WITH METRIC CLINCH NUTS



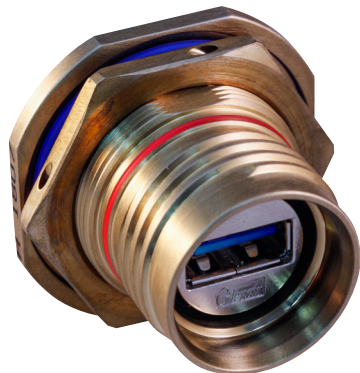


USB 3.0 TYPE A CONNECTORS

MIL-DTL-38999 Series III Type Connectors



233-352 Panel mount receptacles with PC tails



Part Number Development								
Sample Part Number	233-352	NF	00	-15	3	A	N	H
Basic Number	233-352							
Finish	See Material and Finish table							
Connector Style ¹	See Connector Style table							
Shell Size	15							
USB Performance	3 = USB 3.0							
USB Interface (Front and Back)	A = Type A							
Alternate Key Position ¹	A, B, C, D, E, N = Normal per MIL-DTL-38999							
USB Orientation	H = Horizontal V = Vertical							

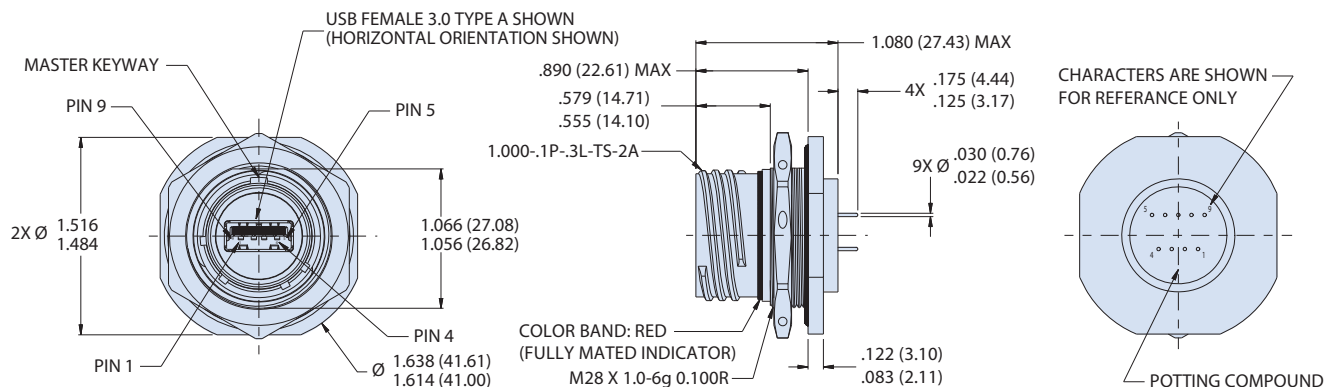
Material and Finish	
NF	Aluminum/Cadmium, Olive Drab
ME	Aluminum/Electroless Nickel
MT	Aluminum/Nickel PTFE
ZR	Aluminum/Black Zinc-Nickel
AB	Marine Bronze
XM	Composite/Electroless Nickel

Additional material / finish options available consult factory

Connector Style	
07	Rear panel mount, jam nut receptacle
00	Wall mount receptacle with slotted holes
D0	Wall mount receptacle with thru-holes
CM	Wall mount receptacle with metric clinch nuts

All external dimensions, features, etc. compliant with D38999/20, /24, &/26. Consult factory for additional information.

07 - JAM-NUT MOUNT RECEPTACLE

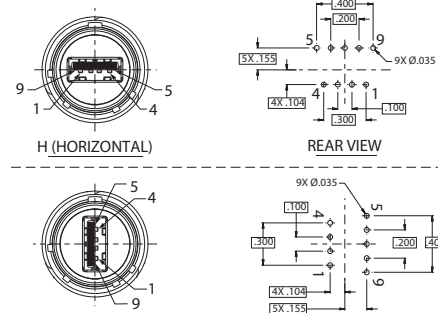


NOTES

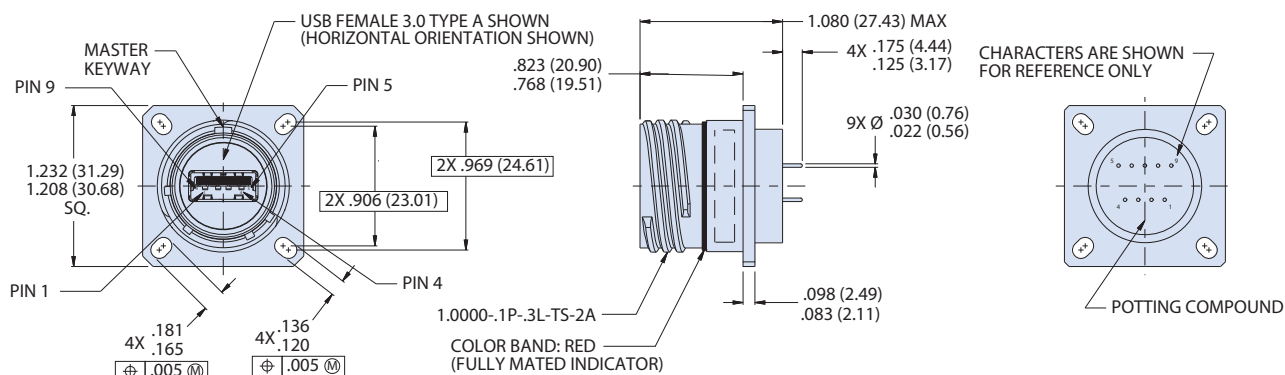
- See Section A for polarization / panel cutout dimensions
- Meets IP67 in unmated condition, IP68 mated
- USB female port, front
- Material and Finish
 - Shell, jam nut: aluminum alloy
 - Insulators: high grade rigid dielectric/n.a.
 - Contacts: copper alloy, gold plated
 - Seals: silicone based elastomer
 - USB (shell/contacts): copper alloy
 - Dielectric: hi-temp thermoplastic PA9T UL94V-0
 - Hardware: stainless steel/passivated

USB 3.0 Wiring		
Pin	Name	Description
1	(V BUS)	+5 V
2	(D-)	USB 2.0 Data
3	(D+)	
4	(GND)	Ground
5	(RX-)	Receiver
6	(RX+)	Receiver
7	(GND)	Ground
8	(TX-)	Transmitter
9	(TX+)	Transmitter

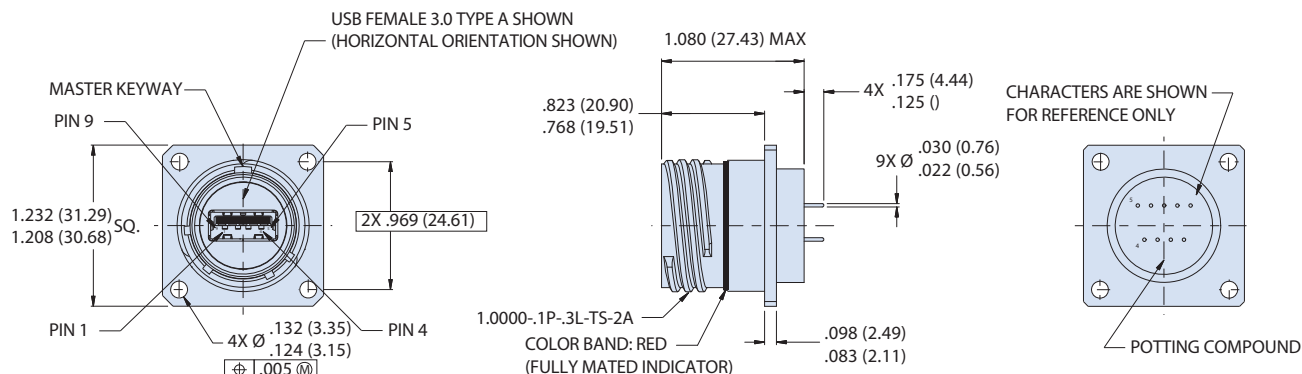
Solder Cup Positions



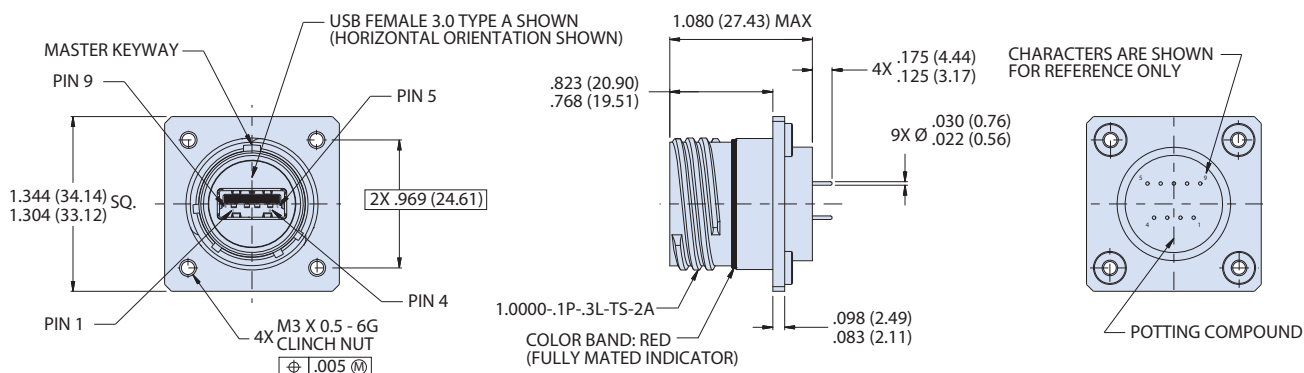
00 - WALL MOUNT RECEPTACLE WITH SLOTTED THRU-HOLES



DO - WALL MOUNT RECEPTACLE WITH ROUND THRU-HOLES



CM - WALL MOUNT RECEPTACLE WITH METRIC CLINCH NUTS



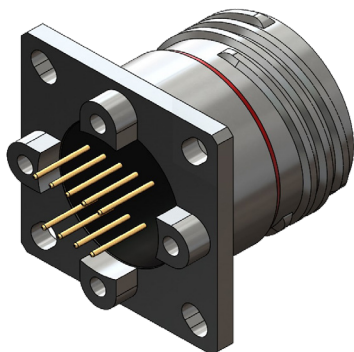


USB 3.0 TYPE A CONNECTORS

MIL-DTL-38999 Series III Type Connectors



233-357 Panel mount receptacles with PC tails and threaded stand-offs



Part Number Development								
Sample Part Number	233-357	NF	00	-15	3	A	N	H
Basic Number	233-357							
Finish	See Material and Finish table							
Connector Style ¹	See Connector Style table							
Shell Size	15							
USB Performance	3 = USB 3.0							
USB Interface (Front and Back)	A = Type A							
Alternate Key Position ¹	A, B, C, D, E, N = Normal per MIL-DTL-38999							
USB Orientation	H = Horizontal V = Vertical							

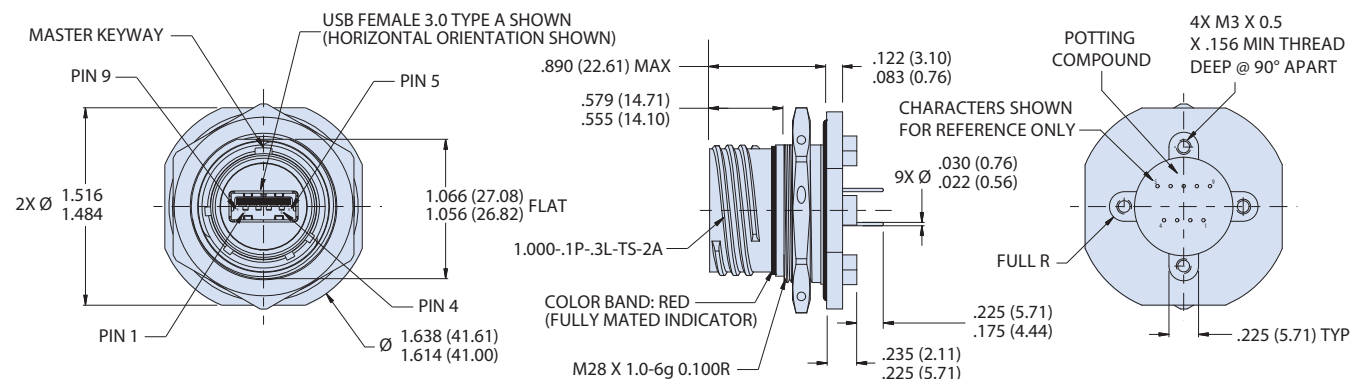
Material and Finish	
NF	Aluminum/Cadmium, Olive Drab
ME	Aluminum/Electroless Nickel
MT	Aluminum/Nickel PTFE
ZR	Aluminum/Black Zinc-Nickel
AB	Marine Bronze
XM	Composite/Electroless Nickel

Additional material / finish options available consult factory

Connector Style	
07	Rear panel mount, jam nut receptacle
00	Wall mount receptacle with slotted holes
D0	Wall mount receptacle with thru-holes
CM	Wall mount receptacle with metric clinch nuts

All external dimensions, features, etc. compliant with D38999/20, /24, &/26. Consult factory for additional information.

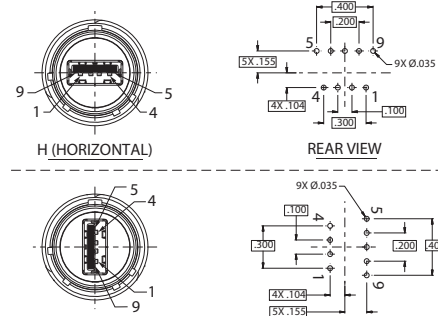
07 - JAM-NUT MOUNT RECEPTACLE



NOTES

- See Section A for polarization / panel cutout dimensions
- Meets IP67 in unmated condition, IP68 mated
- USB female port, front
- Material and Finish
 - Shell, jam nut: aluminum alloy
 - Insulators: high grade rigid dielectric/n.a.
 - Contacts: copper alloy, gold plated
 - Seals: silicone based elastomer
 - USB (shell/contacts): copper alloy
 - Dielectric: hi-temp thermoplastic PA9T UL94V-0
 - Hardware: stainless steel/passivated

Solder Cup Positions





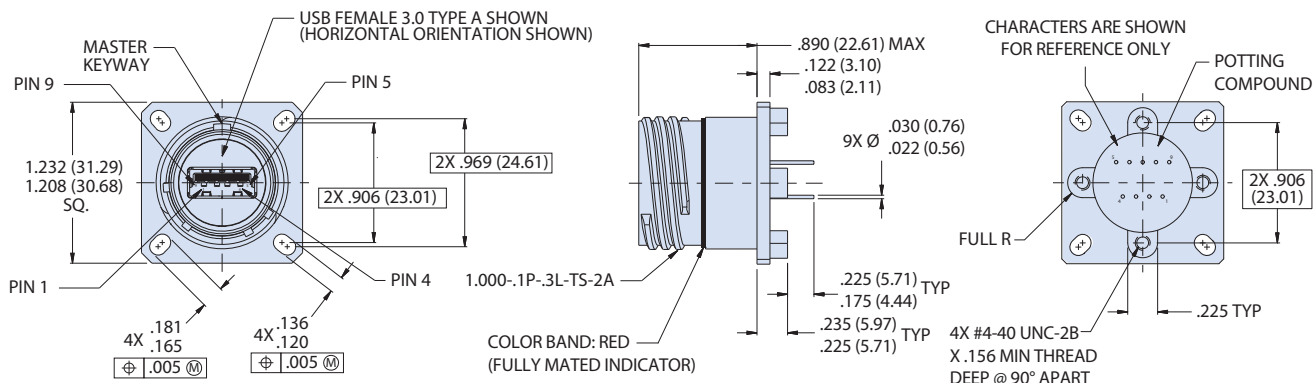
USB 3.0 TYPE A CONNECTORS

MIL-DTL-38999 Series III Type Connectors

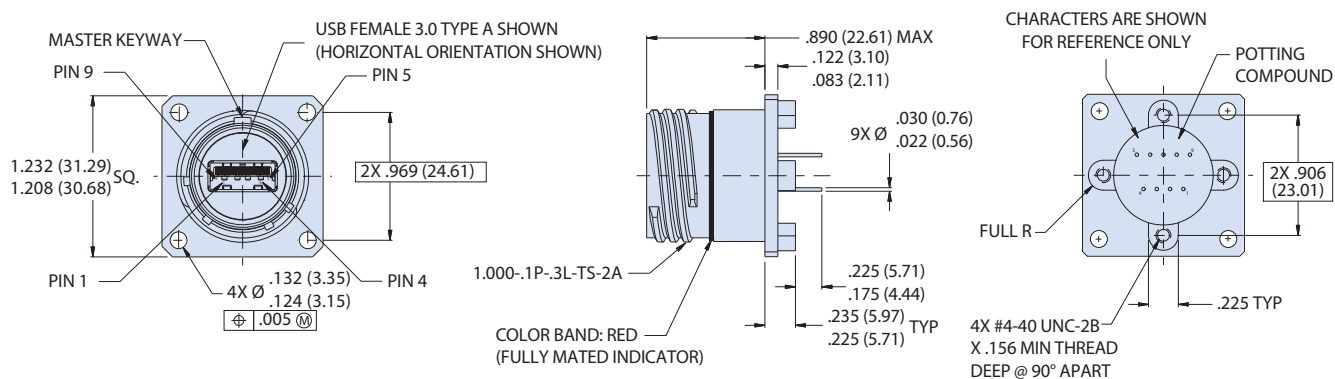


233-357 Panel mount receptacles with PC tails and threaded stand-offs

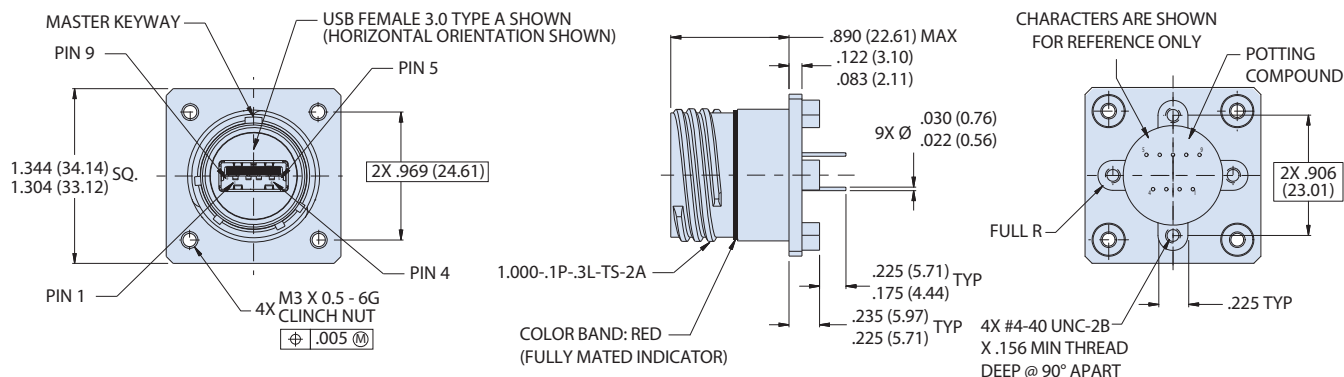
00 - WALL MOUNT RECEPTACLE WITH SLOTTED THRU-HOLES



DO - WALL MOUNT RECEPTACLE WITH ROUND THRU-HOLES



CM - WALL MOUNT RECEPTACLE WITH METRIC CLINCH NUTS





USB 3.0 TYPE A CONNECTORS

MIL-DTL-38999 Series III Type Connectors

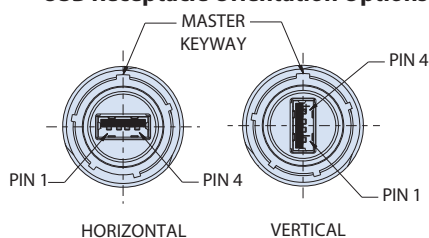


233-353 Panel mount receptacles with solder cups



Part Number Development							
Sample Part Number	233-353	NF	00	-15	3	A	N H
Basic Number	233-353						
Finish	See Material and Finish table						
Connector Style ¹	See Connector Style table						
Shell Size	15						
USB Performance	3 = USB 3.0						
USB Interface (Front and Back)	A = Type A						
Alternate Key Position ¹	A, B, C, D, E, N = Normal per MIL-DTL-38999						
USB Orientation	H = Horizontal V = Vertical						

USB Receptacle Orientation Options

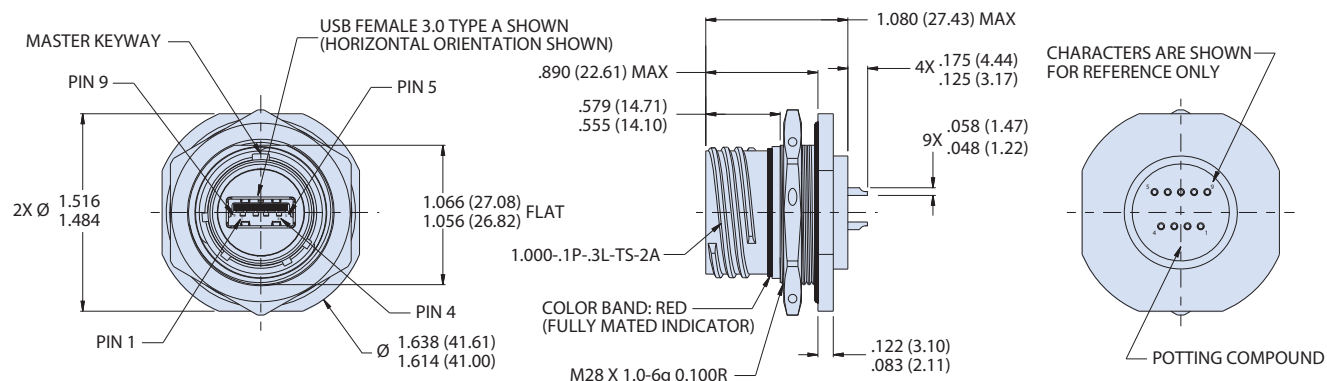


Material and Finish	
NF	Aluminum/Cadmium, Olive Drab
ME	Aluminum/Electroless Nickel
MT	Aluminum/Nickel PTFE
ZR	Aluminum/Black Zinc-Nickel
AB	Marine Bronze
XM	Composite/Electroless Nickel

Additional material / finish options available consult factory

Connector Style	
07	Rear panel mount, jam nut receptacle
00	Wall mount receptacle with slotted holes
D0	Wall mount receptacle with thru-holes
CM	Wall mount receptacle with metric clinch nuts

07 - JAM-NUT MOUNT RECEPTACLE



NOTES

- See Section A for alternate key/keyway positions and panel cutout dimensions
- Meets IP67 in unmated condition, IP68 mated
- USB female port, front
- Rear panel mount only
- Material and Finish
 - Shell, jam nut: al alloy
 - Insulators: high grade rigid dielectric/n.a.
 - Contacts: copper alloy, gold plated
 - Seals: silicone based elastomer

- USB (shell/contacts): copper alloy
- Dielectric: hi-temp thermoplastic PA9T UL94V-0
- Hardware: stainless steel /passivated

All external dimensions, features, etc. compliant with D38999/20, /24, &/26. Consult factory for additional information.

USB 3.0 Wiring		
Pin	Name	Description
1	(V BUS)	+5 V
2	(D-)	USB 2.0 Data
3	(D+)	
4	(GND)	Ground
5	(RX-)	Receiver
6	(RX+)	Receiver
7	(GND)	Ground
8	(TX-)	Transmitter
9	(TX+)	Transmitter



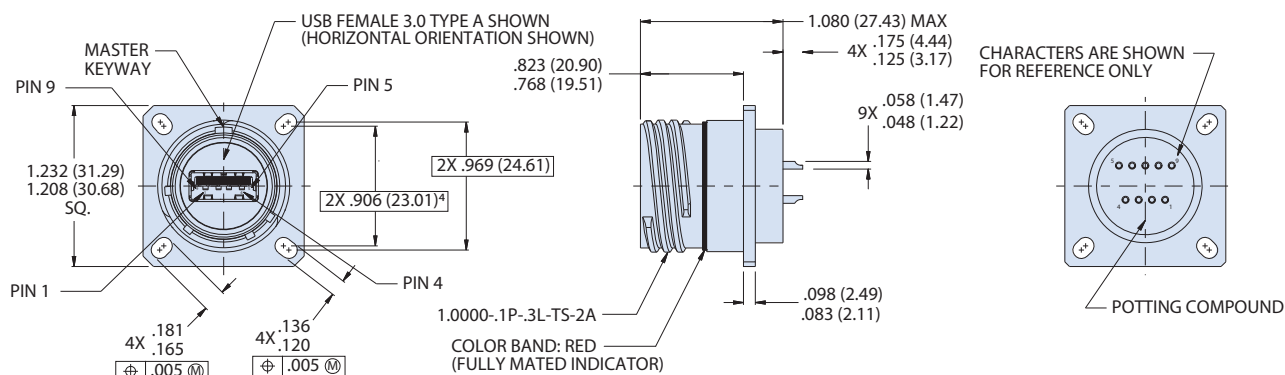
USB 3.0 TYPE A CONNECTORS

MIL-DTL-38999 Series III Type Connectors

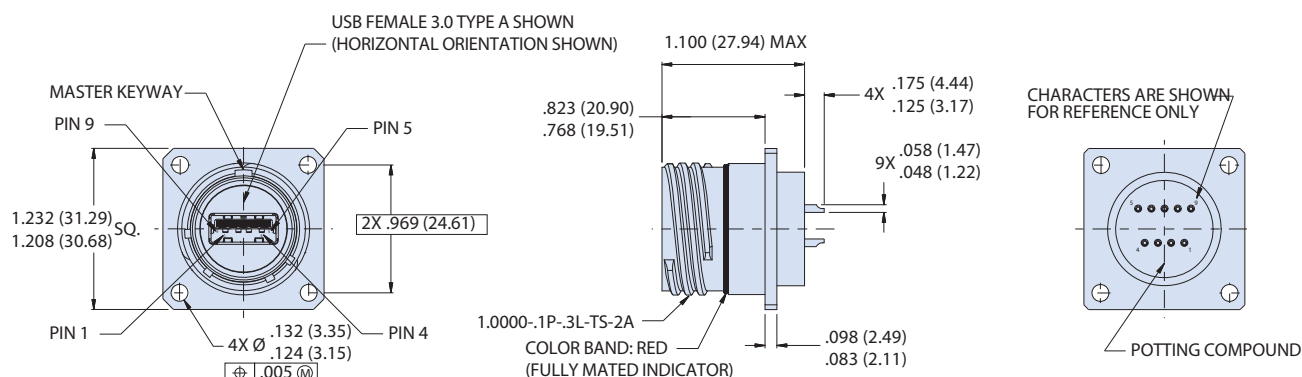


233-353 Panel mount receptacles with solder cups

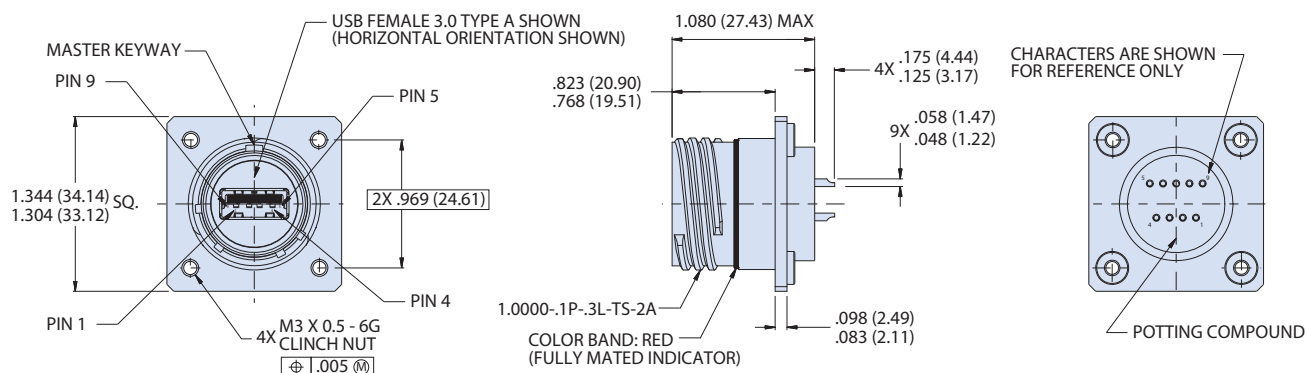
00 - WALL MOUNT RECEPTACLE WITH SLOTTED THRU-HOLES



DO - WALL MOUNT RECEPTACLE WITH ROUND THRU-HOLES



CM - WALL MOUNT RECEPTACLE WITH METRIC CLINCH NUTS



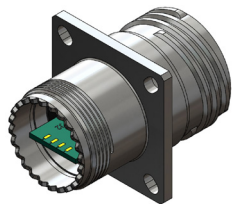


USB 3.0 TYPE A CONNECTORS

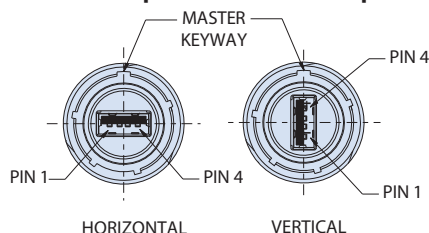
MIL-DTL-38999 Series III Type Connectors



233-354 Panel mount receptacles with breakout board



USB Receptacle Orientation Options



Material and Finish	
NF	Aluminum/Cadmium, Olive Drab
M	Aluminum/Electroless Nickel
MT	Aluminum/Nickel PTFE
ZR	Aluminum/Black Zinc-Nickel

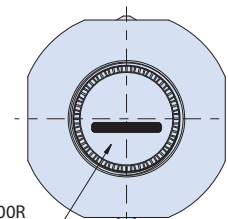
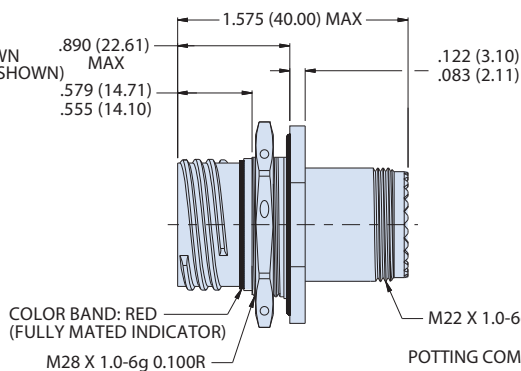
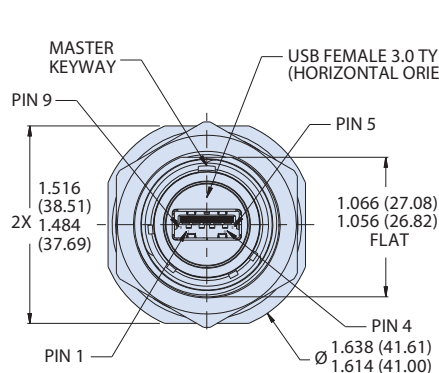
Part Number Development								
Sample Part Number	233-354	NF	00	-15	3	A	N	H
Basic Number	233-354							
Finish	See Material and Finish table							
Connector Style ¹	See Connector Style table							
Shell Size	15							
USB Performance	3 = USB 3.0							
USB Interface (Front and Back)	A = Type A							
Alternate Key Position ¹	A, B, C, D, E, N = Normal per MIL-DTL-38999							
USB Orientation	H = Horizontal V = Vertical							

Material and Finish	
NF	Aluminum/Cadmium, Olive Drab
ME	Aluminum/Electroless Nickel
MT	Aluminum/Nickel PTFE
ZR	Aluminum/Black Zinc-Nickel
AB	Marine Bronze
XM	Composite/Electroless Nickel

Additional material / finish options available consult factory

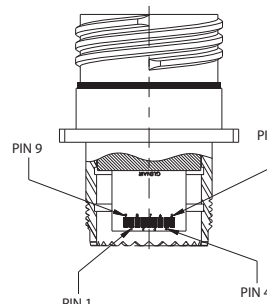
All external dimensions, features, etc. compliant with D38999/20, /24, &/26. Consult factory for additional information.

07 - JAM-NUT MOUNT RECEPTACLE



NOTES

- See Section A for alternate key/keyway positions and panel cutout dimensions
- Meets IP67 in unmated condition, IP68 mated
- USB female port, front
- Material and Finish
 - Shell, jam nut: al alloy
 - Insulators: high grade rigid dielectric/n.a.
- Contacts: copper alloy, gold plated
- Seals: silicone based elastomer
- USB (shell/contacts): copper alloy
- Dielectric: hi-temp thermoplastic PA9T UL94V-0
- Hardware: stainless steel / passivated



USB 3.0 Wiring		
Pin	Name	Description
1	(V BUS)	+5 V
2	(D-)	USB 2.0 Data
3	(D+)	
4	(GND)	Ground
5	(RX-)	Receiver
6	(RX+)	Receiver
7	(GND)	Ground
8	(TX-)	Transmitter
9	(TX+)	Transmitter



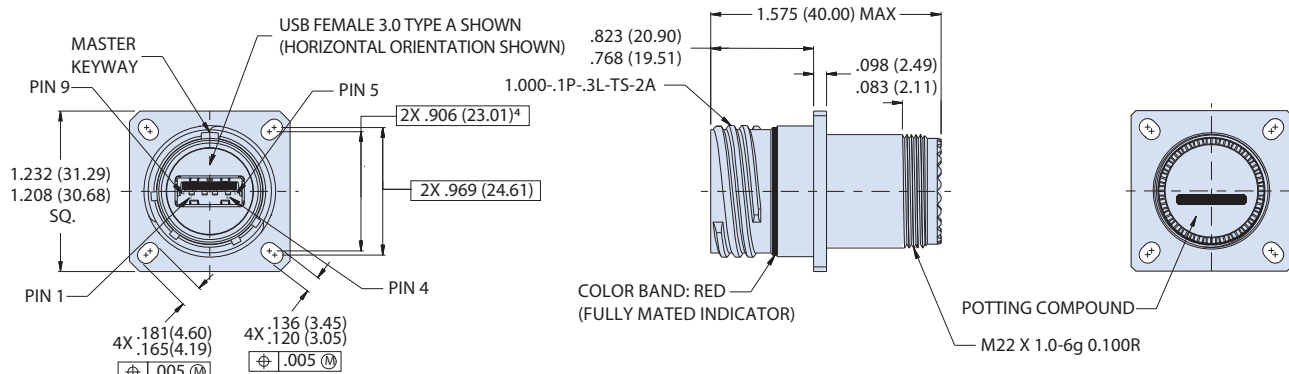
USB 3.0 TYPE A CONNECTORS

MIL-DTL-38999 Series III Type Connectors

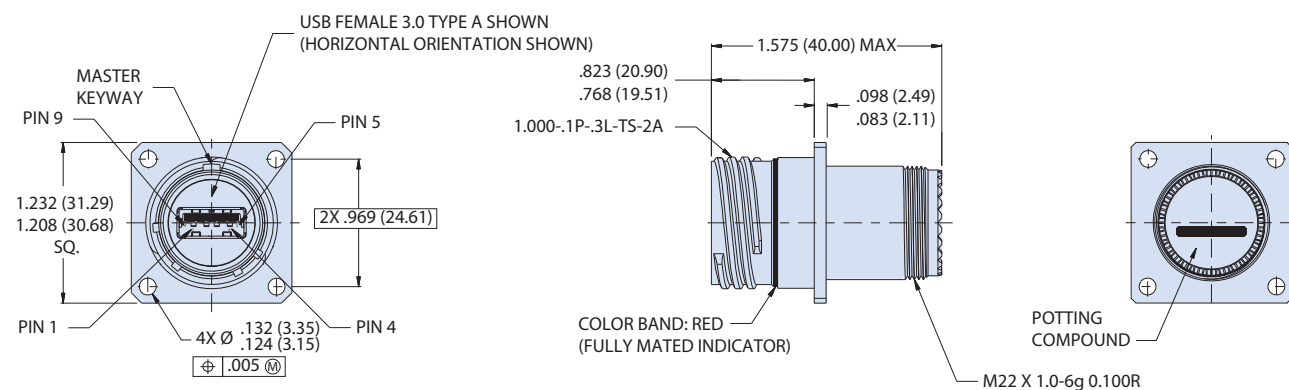


233-354 Panel mount receptacles with breakout board

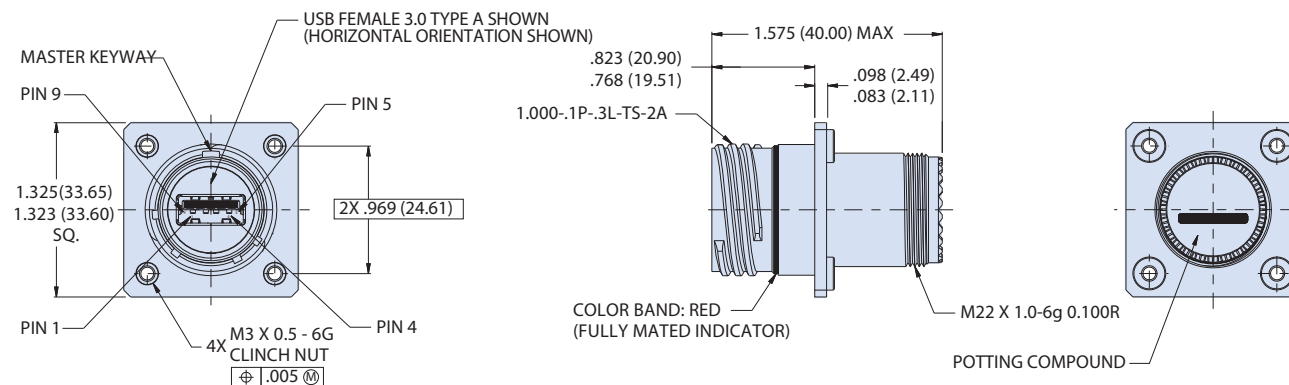
00 - WALL MOUNT RECEPTACLE WITH SLOTTED THRU-HOLES



DO - WALL MOUNT RECEPTACLE WITH ROUND THRU-HOLES



CM - WALL MOUNT RECEPTACLE WITH METRIC CLINCH NUTS





USB 3.0 TYPE A CONNECTORS

MIL-DTL-38999 Series III Type Connectors



233-355 Panel mount feed-through connectors



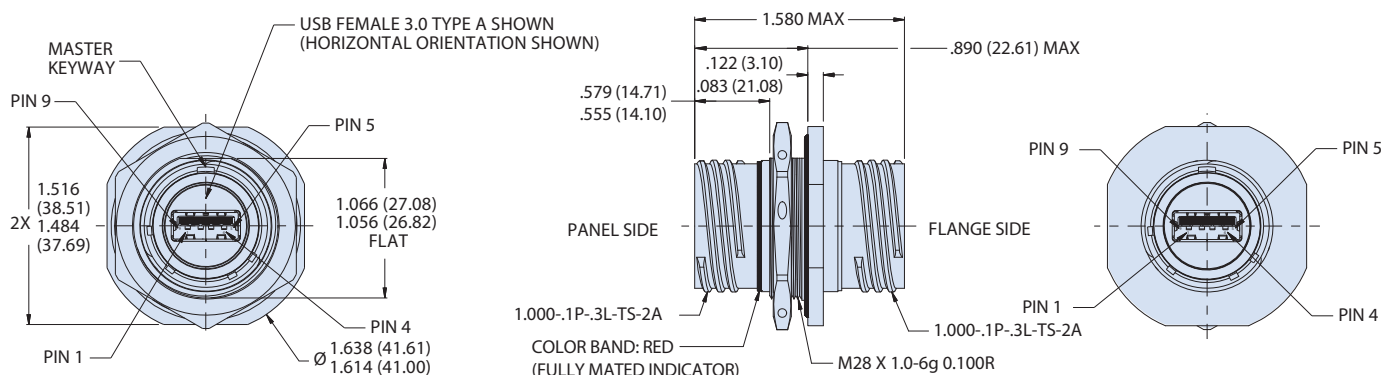
Part Number Development								
Sample Part Number	233-355	NF	00	-15	3	A	N	H
Basic Number	233-355							
Finish	See Material and Finish table							
Connector Style ¹	See Connector Style table							
Shell Size	15							
USB Performance	3 = USB 3.0							
USB Interface (Front and Back)	A = Type A							
Alternate Key Position ¹	A, B, C, D, E, N = Normal per MIL-DTL-38999							
USB Orientation	H = Horizontal V = Vertical							

Material and Finish	
NF	Aluminum/Cadmium, Olive Drab
ME	Aluminum/Electroless Nickel
MT	Aluminum/Nickel PTFE
ZR	Aluminum/Black Zinc-Nickel

Connector Style	
07	Rear panel mount, jam nut receptacle
00	Wall mount receptacle with slotted holes
D0	Wall mount receptacle with thru-holes
CM	Wall mount receptacle with metric clinch nuts

All external dimensions, features, etc. compliant with D38999/20, /24, &/26. Consult factory for additional information.

07 - JAM-NUT MOUNT RECEPTACLE

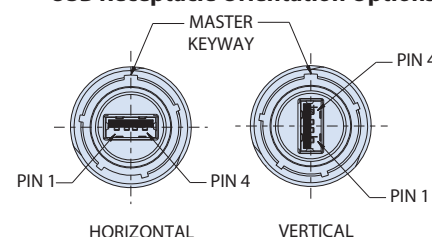


NOTES

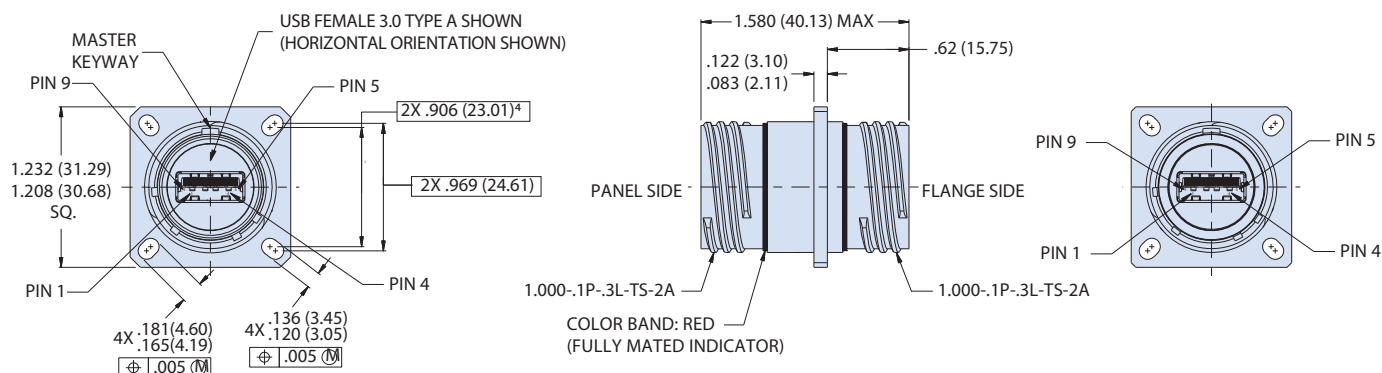
- See Section A for alternate key/keyway positions and panel cutout dimensions
- Meets IP67 in unmated condition, IP68 mated
- USB female port, front
- Material and Finish
 - Shell, jam nut: al alloy
 - Insulators: high grade rigid dielectric/n.a.
 - Contacts: copper alloy, gold plated
 - Seals: silicone based elastomer

- USB (shell/contacts): copper alloy
- Dielectric: hi-temp thermoplastic PA9T UL94V-0
- Hardware: stainless steel /passivated

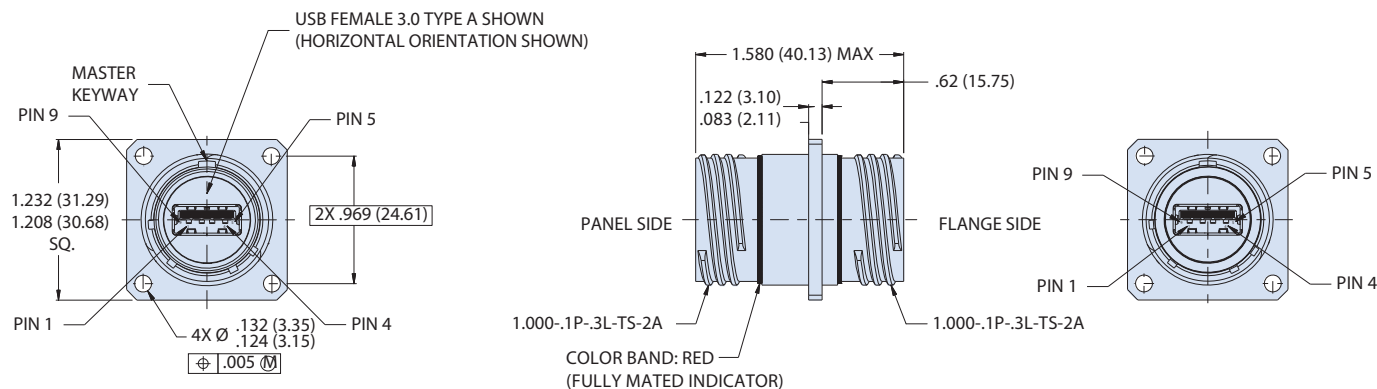
USB Receptacle Orientation Options



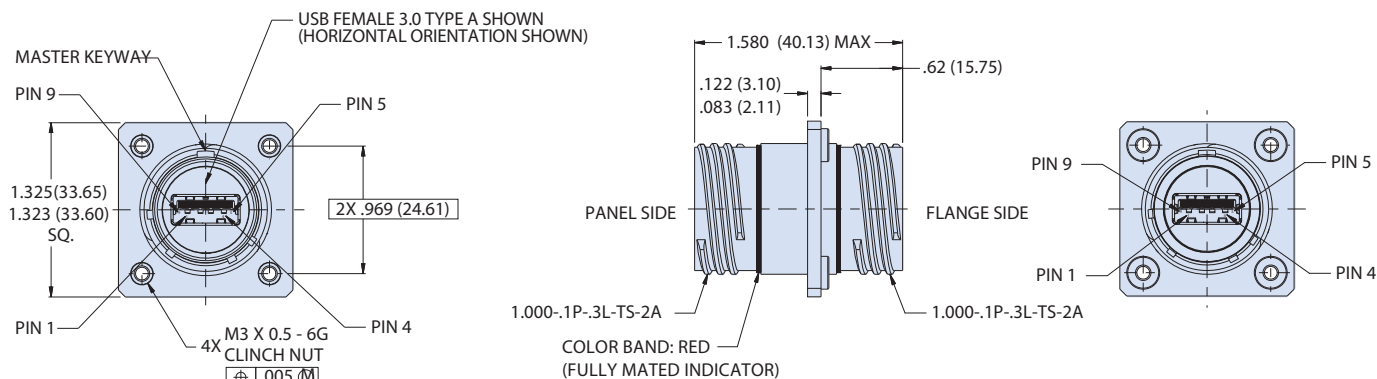
00 - WALL MOUNT RECEPTACLE WITH SLOTTED THRU-HOLES



DO - WALL MOUNT RECEPTACLE WITH ROUND THRU-HOLES



CM - WALL MOUNT RECEPTACLE WITH METRIC CLINCH NUTS





USB 3.0 TYPE A CONNECTORS

MIL-DTL-38999 Series III Type Connectors



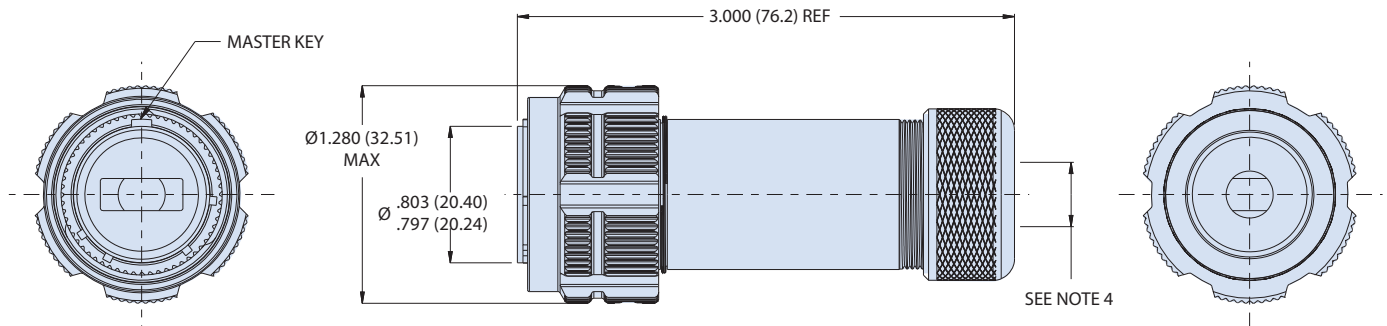
233-358 Plug USB cord adapter



Part Number Development						
Sample Part Number	233-358	NF	G6	-15	N	H
Basic Number	233-358					
Finish	See Material and Finish table					
Connector Style ¹	G6 = plug					
Shell Size	15					
Alternate Key Position ¹	A, B, C, D, E, N = Normal per MIL-DTL-38999					
USB Orientation	H = Horizontal V = Vertical					

Material and Finish	
NF	Aluminum/Cadmium, Olive Drab
ME	Aluminum/Electroless Nickel
MT	Aluminum/Nickel PTFE
ZR	Aluminum/Black Zinc-Nickel

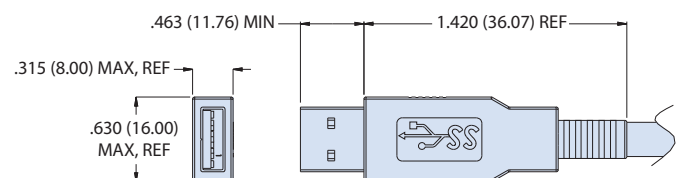
All external dimensions, features, etc. compliant with D38999/20, /24, &/26. Consult factory for additional information.



NOTES

1. See Section A for polarization / panel cutout dimensions
2. Meets IP68 in mated condition, IP68 mated condition
3. Accommodates USB 3.0 patch cords with Type A plug interface
4. Accommodates cable outside diameter 0.118 (2.997) to 0.243 (6.172)
5. USB female port, front
6. Material and Finish
 - Shell, coupling nut: aluminum alloy (composite coupling nut no plating required)
 - Insulators: high grade rigid dielectric/n.a.
 - Seals: silicone based elastomer
 - USB adapter housing: UL94V-0 compliant ABS or PPS
 - Hardware: stainless steel /passivated

RECOMMENDED USB TYPE A PLUG DESIGN





USB 3.0 TYPE A CONNECTORS

MIL-DTL-38999 Series III Type Connectors



2330-0445 USB 3.0 Cable assembly



2330-0445 Glenair SuperSeal™ USB 3.0 cable jumpers, with SuperNine® connectors to standard USB Type A plug

SuperSeal USB connectors are IP67 open face rated and IP68 in the mated condition for complete protection in harsh environments. SuperSeal connector styles include plug, wall mount and jam-nut receptacles. USB 3.0 can be ordered in horizontal or vertical orientation to provide further security against mis-mating and conform to existing USB orientations. Please consult factory for custom configurations.

All external dimensions, features, etc. compliant with D38999/20, /24, &/26. Consult factory for additional information.

Material and Finish	
NF	Aluminum/cadmium, olive drab
ME	Aluminum/electroless nickel
ZR	Zinc nickel, black (tri-valent chromium) RoHS compliant

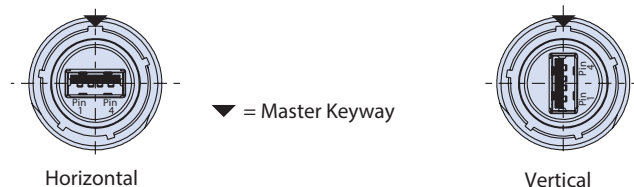
Connector Style	
G6	Plug
07	Rear panel mount, jam nut receptacle
00	Wall mount receptacle with slotted holes ²

Part Number Development									
Sample Part Number	2330-0445	NF	07	-15	3	A	N	H	-03
Basic Number	2330-0445								
P1 Finish	See Material and Finish table								
P1 Connector Style¹	See Connector Style table								
P1 Shell Size	15								
USB Performance	3 = USB 3.0								
USB Interface	A = Type A								
Polarization	N = Normal								
USB Orientation	H = Horizontal V = Vertical								
Overall Length	01, 02, 03, 06 and 10 feet in length. For lengths longer than 10 feet use 2330-0450 repeaters for optimal performance								

NOTES

- See Section A for panel cutout dimensions
- Meets IP67 in unmated condition, IP68 mated
- USB 3.0 Specifications
DWV: 100 VAC (RMS)
IR: 100 Megohms minimum
Operating Temperature: 20°C to +85°C
- Standard configurations provided with adhesive lined shrink boot
- SuperSeal plug houses USB plug.
Superseal receptacle houses USB receptacle

USB Receptacle Orientation Options (Partial Views Shown)





USB 3.0 TYPE A CONNECTORS

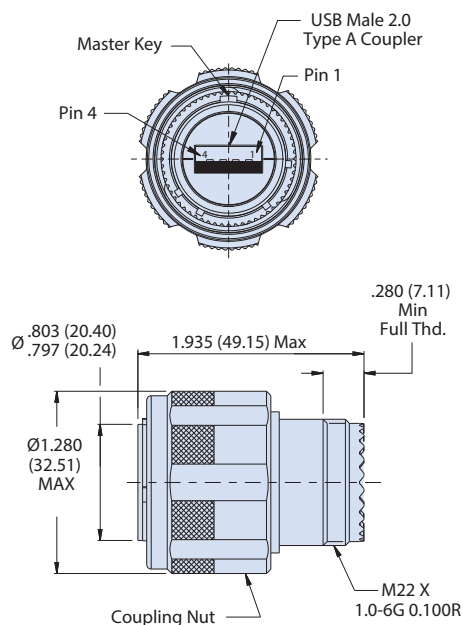
MIL-DTL-38999 Series III Type Connectors



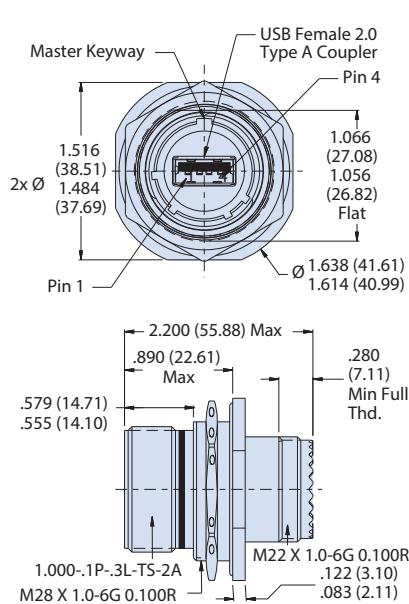
2330-0445 USB 3.0 Cable assembly

AVAILABLE P 1 CONNECTOR DIMENSIONS, SHELL SIZE 15

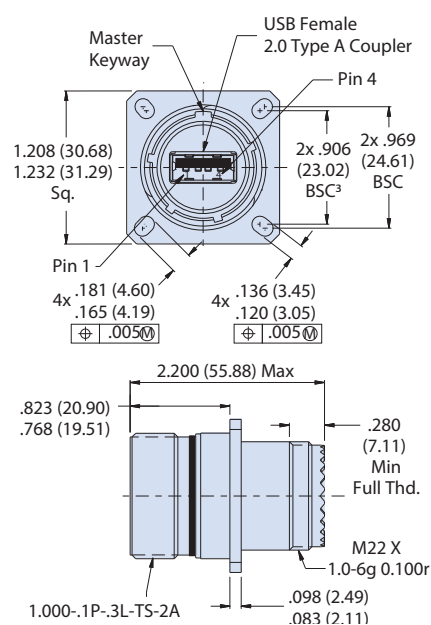
G6 Plug



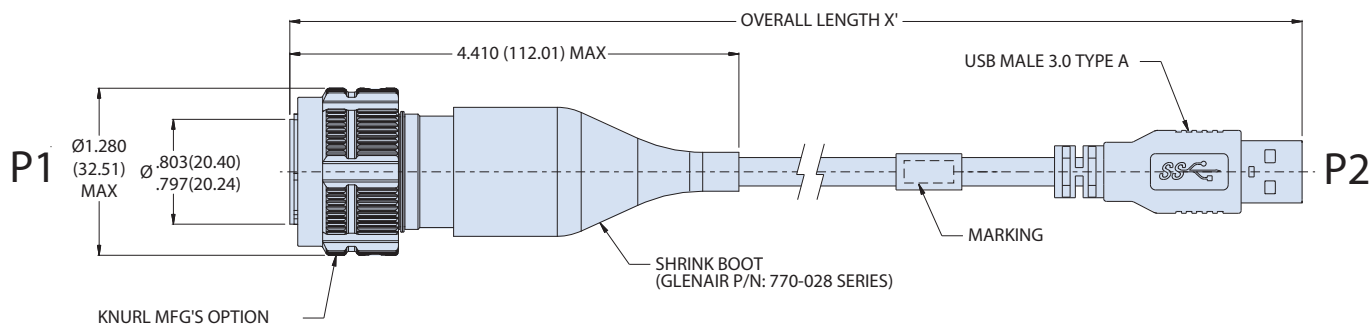
07 Receptacle, Jam-Nut Mount



00 Receptacle, Wall Mount



CABLE ASSEMBLY SHOWN WITH PLUG CONNECTOR STYLE





USB 3.0 TYPE A CONNECTORS

MIL-DTL-38999 Series III Type Connectors



2330-0450 USB 3.0 cable assembly with active repeater



All external dimensions, features, etc. compliant with D38999/20, /24, &/26. Consult factory for additional information.

Material and Finish	
NF	Aluminum/cadmium, olive drab
ME	Aluminum/electroless nickel
ZR	Zinc nickel, black (tri-valent chromium) RoHS compliant

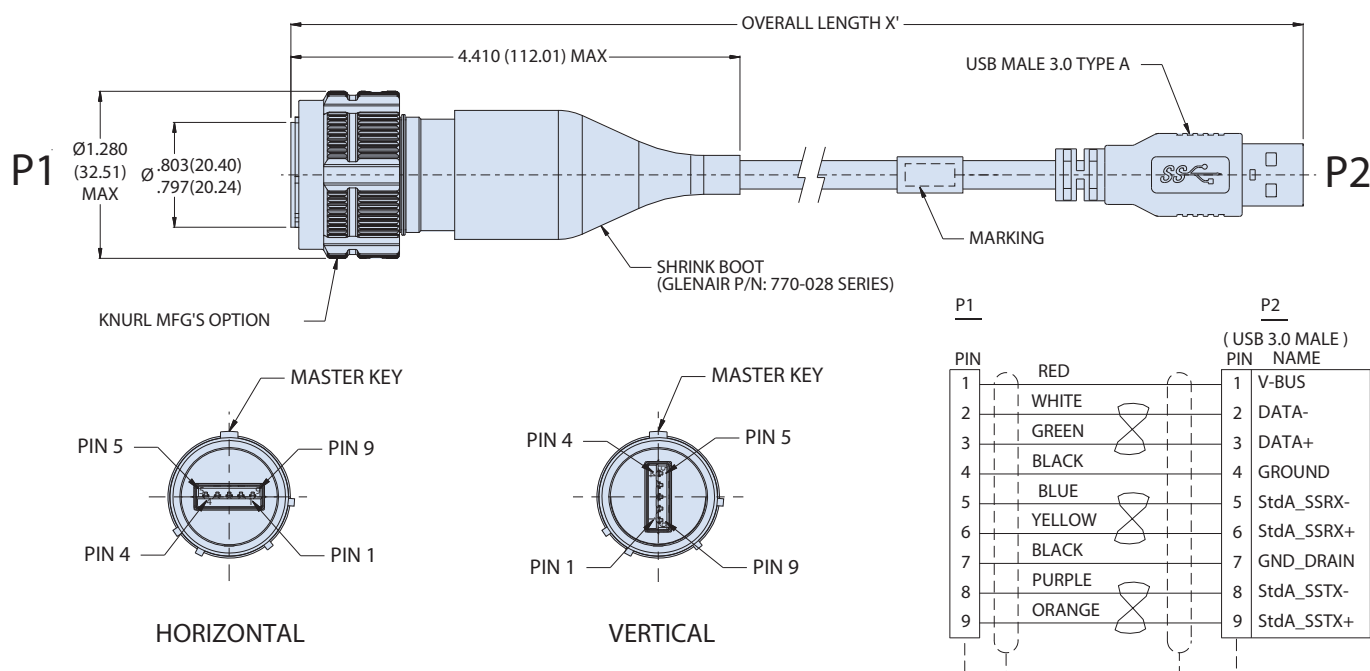
NOTES

1. Meets IP67 in unmated condition, IP68 mated
2. SuperSeal plug houses USB plug.

2330-0450 Glenair SuperSeal™ USB 3.0 plug cable jumper, with active repeater.

SuperSeal USB cable assemblies with IP67 open face rated connectors offer complete protection from environmental debris and water ingress common under harsh environmental conditions. USB 3.0 can be ordered in horizontal or vertical orientation to provide further security against mis-mating and conforms to existing USB orientations. Additional length options and custom configurations available. Please consult factory.

Part Number Development									
Sample Part Number	2330-0450	NF	G6	-15	3	A	N	H	-03
Basic Number	2330-0450								
P1 Finish	See Material and Finish table								
P1 Connector Style¹	G6 = Plug								
P1 Shell Size	15								
USB Performance	3 = USB 3.0								
USB Interface	A = Type A								
Polarization	A, B, C, D, E, N = Normal								
USB Orientation	H = Horizontal V = Vertical								
Overall Length	01 thru 10 ; length in feet.								





USB 3.0 TYPE A CONNECTORS

MIL-DTL-38999 Series III Type Connectors



233-392 USB 3.0 Memory stick

Part Number Development							
Sample Part Number	233-392	NF	32	15	-N	H	P
Series / Basic Part No.	233-392						
Material/Finish	NF = Aluminum/cadmium olive drab ME = Aluminum/electroless nickel MT = Aluminum/nickel PTFE ZR = Aluminum/zinc-nickel						
Storage Capacity Options	32 = 32 GB, 64 = 64 GB, 128 = 128 GB, 256 = 256 GB						
Shell Size	15						
Alternate Polarization	A, B, C, D, E, N = Normal; Per MIL-DTL-38999						
USB Orientation	H = Horizontal V = Vertical						
Protective Cover Option	P = Series 660-023 cover; Omit for none						

NOTES

- Contact factory for details of protective cover options.
- This connector is designed to mate with Glenair part numbers 233-350,-352,-353,-354 &-355.
- USB flash memory specifications:
 - Storage capacity - 32 GB, 64 GB, 128 GB, 256 GB (consult factory for other capacity options)
 - System requirements - windows 2000, xp, vista, windows 7.
 - Compatibility - plug and play; USB 3.0 compliance; backward compatible with USB 2.0.
 - Interface - USB 3.0, Type a male.
 - Data transfer rates - see table II
 - Password protection and AES encryption.
 - Environmental parameters:
 - » Operating temperatures - -40°C to 85°C
 - » Storage temperatures - -40°C to 85°C
 - » Humidity range operating - 10% to 95%.
- Material/finishes:
 - Barrel, coupling nut - see part number development
 - Insulators-high grade rigid dielectric/N.A.
 - Seal: fluorosilicone/N.A.
 - EMI grounding spring-BeCu/ electroless nickel plate.
 - Hardware: stainless steel/ passivated
- Assembly shall be identified with Glenair's name, part number and date code, space permitting.
- Interpret drawing per ASME Y14.5 - 2009.

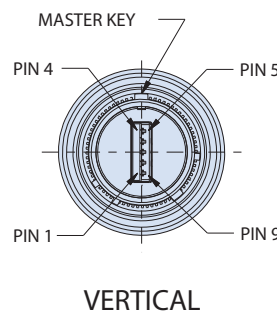
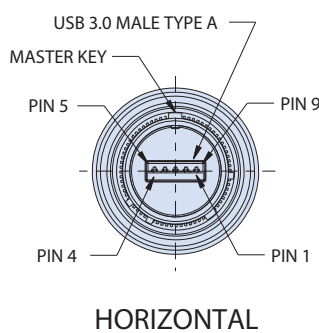
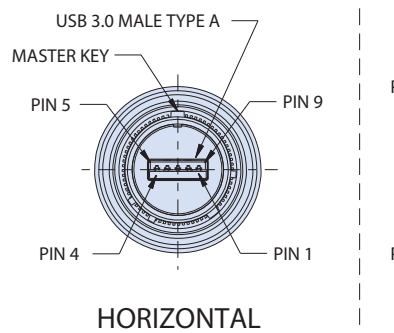
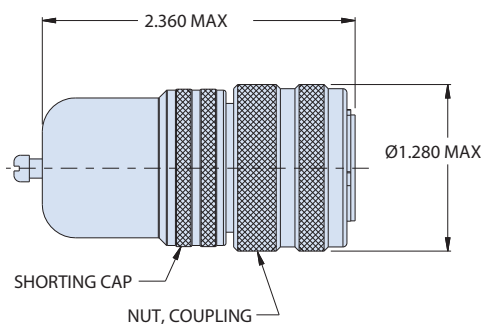


Table II		
Read / Write Performance		
Capacity	Read (Mb/S)	Write (Mb/S)
32 GB	190	45
64 GB	190	95
128 GB	195	95
256 GB	180	130



C

SERIES 23

SuperSeal™

Ruggedized USB 3.2 Gen 2 Type C connectors



Features:

- **USB 3.2 Gen 2 Type C SuperSpeed 10 Gb/s**
- **Ruggedized D38999 interface with enhanced shielding and grounding**
- **Superior sealing: IP68 mated, IP67 open-face; except 'Drive-Thru' plug**
- **Military-grade vibration and shock performance**
- **Increased operating temperature range compared to commercial-grade USB connectors**

38999 Type SuperSeal™ ruggedized connectors offer outstanding environmental sealing and metal-to-metal shell grounding performance for commercial USB 3.2 Gen 2 Type C interfaces in a standard 38999 type package. Connectors are IP68 rated when mated and IP67 rated in the unmated condition for complete system protection against water sand and dust. These rugged field connectors offer military-grade harsh-environment protection for the SuperSpeed 10Gb/s and fast charging that USB 3.2 provides. The Type C interface allows smaller shell sizes to be utilized for lighter weight systems and panel real estate savings. 38999 Type SuperSeal™ USB 3.2 connectors feature polarized keys to prevent mismatching and non-corrosive, conductive material and finish options. The durable SuperSeal™ insert design provides an enhanced operating temperature range, increased life cycle, and rugged vibration and shock performance. Simple plug-and-play connectivity and hot-swappable addition of external peripherals without restarting systems. Crimp, solder-cup, PC tail and cable assemblies available.



USB 3.2 GEN 2, AND USB TYPE C CONNECTORS

MIL-DTL-38999 Series III Type Connectors

Product Selection Guide



233-380

C-42

233-380 Receptacle Connector with USB 3.2 Gen 2 (Type C) Female-to-Female Ports



233-382

C-45

233-382 Receptacle Connector with Female USB 3.2 Gen 2 (Type C) Port to PC Tail Termination



233-384

C-48

233-384 Receptacle Connector with Female USB 3.2 Gen 2 (Type C) Port to Breakout Board



233-388

C-51

233-388 'Drive-Thru' Plug provides IP68 sealing in mated condition for standard

New name	Old name	Original name	SuperSpeed name	Max speed	USB TYPE	Product Lines related
USB 3.2 Gen 2x2	N/A	USB 3.2	SuperSpeed USB 20Gbps	20Gbps	C	Versalink
USB 3.2 Gen 2	USB 3.1 Gen 2	USB 3.1	SuperSpeed USB 10Gbps	10Gbps	C	Versalink, 233-380, 233-382, 233-384, 233-388
USB 3.2 Gen 1	USB 3.1 Gen 1	USB 3.0	SuperSpeed USB	5Gbps	A	253-045, 253-044, El-Ochito Blue, Versalink, 233-350, 233-352, 233-354, El-Ochito Mighty Mouse, Speed Master, High Speed Micro-D, Superfly (882-00/010)



USB 3.2 TYPE A CONNECTORS

MIL-DTL-38999 Series III Type Connectors



233-380 Receptacle Connector with USB 3.2 Gen 2 (Type C) Female-to-Female Ports



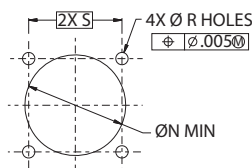
All external dimensions, features, etc. compliant with D38999/20, /24, &/26. Consult factory for additional information.

Material and Finish

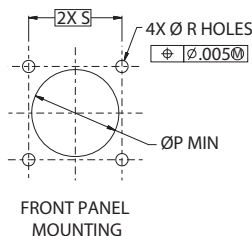
Sym.	Material	Finish Description
NF	aluminum	cadmium, olive drab
ME		electroless nickel (96 hour salt spray)
ZR		zinc nickel, black (tri-valent chromium) RoHS compliant
XM	composite	electroless nickel
Z1	SST	passivate
AB	marine bronze	none (clean only)

Consult factory for other options

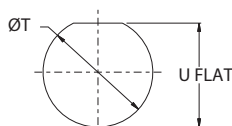
Back panel mounting



Recommended mounting holes panel thickness .288 max (See panel cutout and wall mount dimensions)



Recommended panel cut out for jam-nut receptacle



233-380 Glenair SuperSeal™ USB 3.2 Female to Female Coupler

SuperSeal USB 3.2 connectors are IP67 open face rated and offer complete protection from environmental debris and water ingress common under harsh environmental conditions. Design meets USB 3.2 Gen 2 (Type C) benchmark data transfer rate requirements for read and write performance requirements.

Part Number Development

Sample Part Number	233-380	NF	00	-11	N	H
Basic Number	233-380					
Material / Finish	See Material and Finish table					
Connector Style	00 = Receptacle, Wall Mount, with Slotted Holes D0 = Receptacle, Wall Mount, Round Holes CM = Receptacle, Wall Mount with Metric Clinch Nuts CS = Receptacle, Wall Mount, with Standard Clinch Nuts 07 = Receptacle, Jam-Nut 05 = Receptacle, Inline					
Shell Size	11, 13					
Alternate Polarization	A, B, C, D, E, N = Normal					
USB Orientation	H = Horizontal V = Vertical					

Wall Mount Dimensions

SHELL SIZE	A THREAD	B SQ	B' SQ	C BSC	D BSC	E THREAD
11	.7500-.1P-.3L-TS-2A	1.043 (26.49) 1.019 (25.88)	1.132 (28.75) 1.092 (27.74)	0.812 (20.62)	0.719 (18.26)	M15 X 1.0-6g 0.100R
13	.8750-.1P-.3L-TS-2A	1.138 (28.91) 1.114 (28.30)	1.226 (31.14) 1.186 (30.12)	0.906 (23.01)	0.812 (20.62)	M18 X 1.0-6g 0.100R

Jam Nut Mount & Inline Dimensions

SHELL SIZE	F THREAD	ØG	H	J FLAT	K THREAD	L THREAD	ØM MAX
11	.7500-.1P-.3L-TS-2A	1.386 (35.20) 1.362 (34.59)	1.268 (32.21) 1.236 (31.39)	0.755 (19.18) 0.745 (18.92)	M20 X 1.0-6g 0.100R	M15 X 1.0-6g 0.100R	0.984 (24.99)
13	.8750-.1P-.3L-TS-2A	1.512 (38.40) 1.488 (37.80)	1.390 (35.31) 1.358 (34.49)	0.942 (23.93) 0.932 (23.67)	M25 X 1.0-6g 0.100R	M18 X 1.0-6g 0.100R	1.157 (29.39)

Panel Cutout & Wall Mount Dimensions

SHELL SIZE	ØN MIN	ØP MIN	R HOLES	S BSC	ØT	U FLAT
11	0.796 (20.22)	0.625 (15.88)	0.133 (3.38) 0.123 (3.12)	0.812 (20.62)	0.835 (21.21) 0.825 (20.96)	0.771 (19.58) 0.761 (19.33)
13	0.922 (23.42)	0.750 (19.05)		0.906 (23.01)	1.020 (25.91) 1.010 (25.65)	0.955 (24.26) 0.945 (24.00)

NOTES

1. Meets IP67 in unmated condition, IP68 mated
2. Operating temperature: -20°C to +85°C



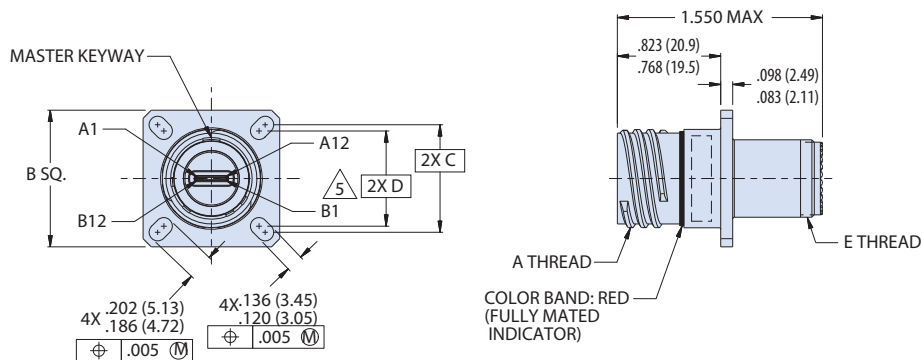
USB 3.2 TYPE A CONNECTORS

MIL-DTL-38999 Series III Type Connectors

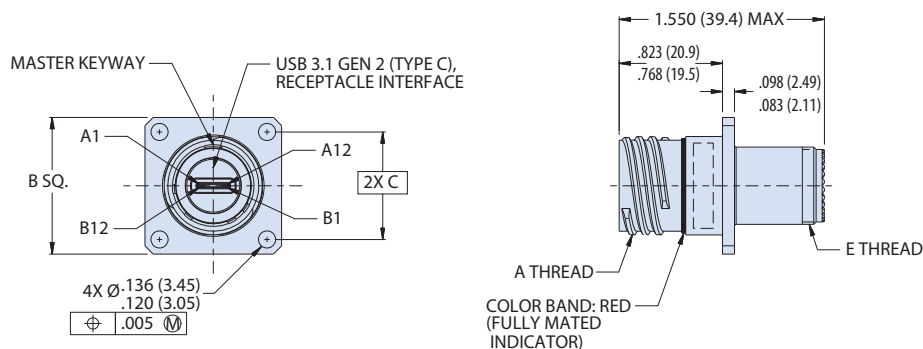


233-380 Receptacle Connector with USB 3.2 Gen 2 (Type C) Female-to-Female Ports

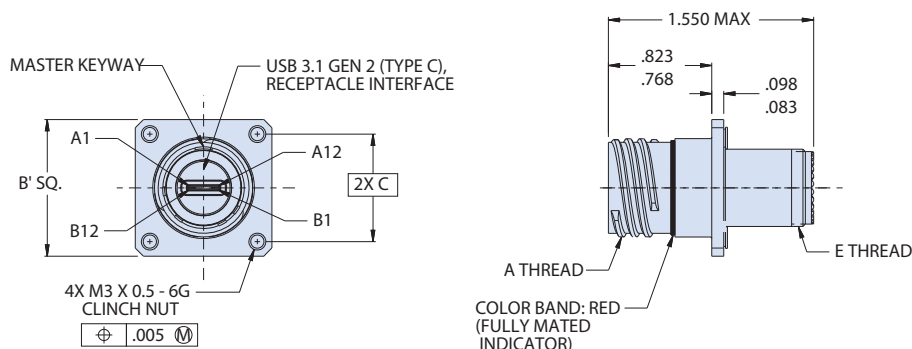
00 - WALL MOUNT RECEPTACLE WITH SLOTTED HOLES



D0 - WALL MOUNT RECEPTACLE WITH ROUND HOLES



CM - WALL MOUNT RECEPTACLE WITH METRIC CLINCH NUTS





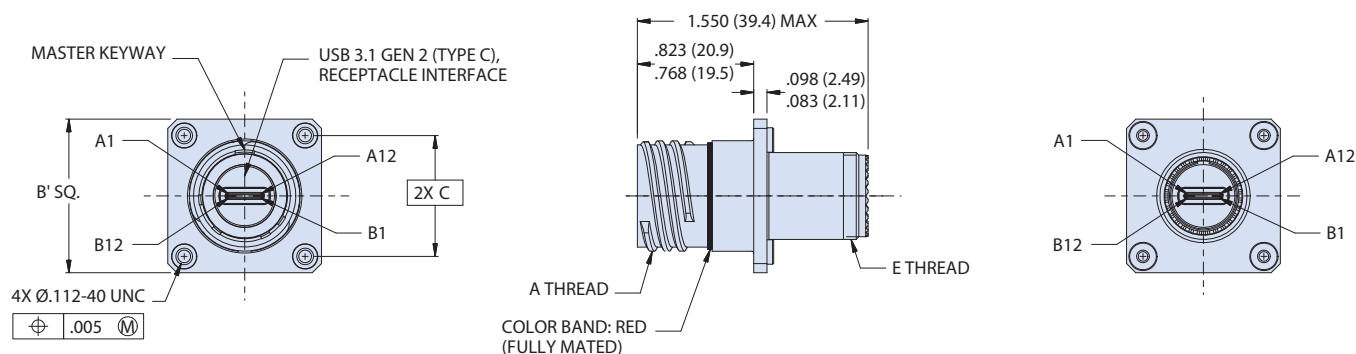
USB 3.2 TYPE A CONNECTORS

MIL-DTL-38999 Series III Type Connectors

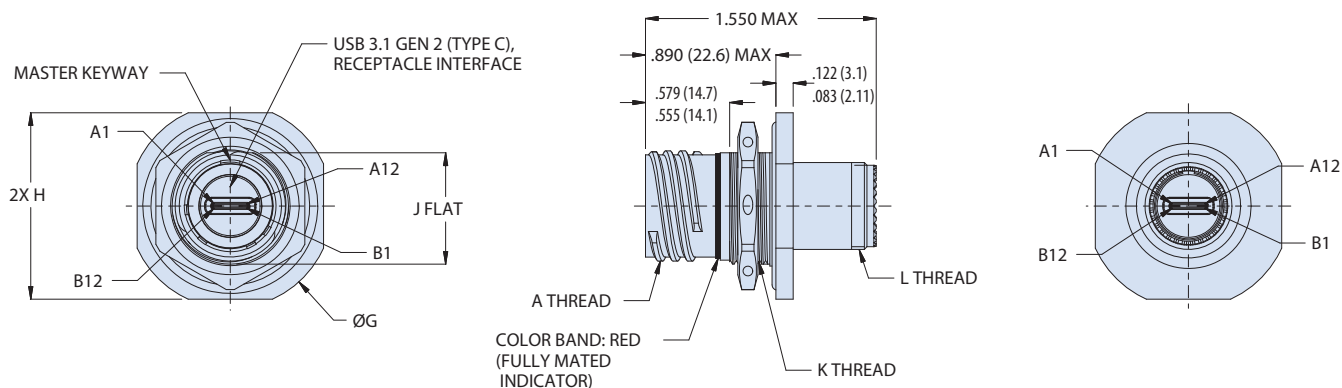


233-380 Receptacle Connector with USB 3.2 Gen 2 (Type C) Female-to-Female Ports

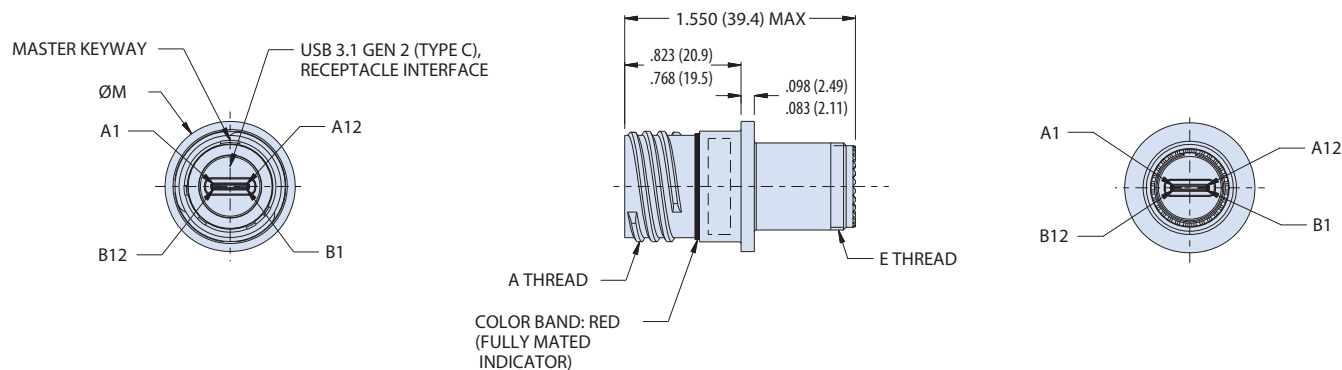
CS - WALL MOUNT RECEPTACLE WITH STANDARD CLINCH NUTS



07 - JAM NUT MOUNT RECEPTACLE



05 - INLINE RECEPTACLE



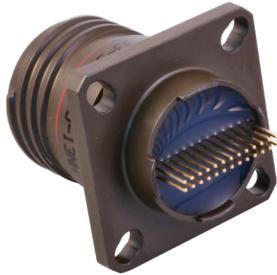


USB 3.2 TYPE A CONNECTORS

MIL-DTL-38999 Series III Type Connectors



233-382 Receptacle Connector with Female USB 3.2 Gen 2 (Type C) Port to PC Tail Termination

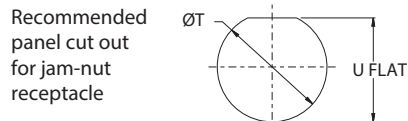
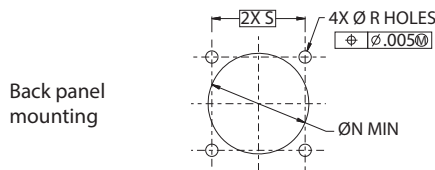


All external dimensions, features, etc. compliant with D38999/20, /24, &/26. Consult factory for additional information.

Material and Finish		
Sym.	Material	Finish Description
NF	aluminum	cadmium, olive drab
ME		electroless nickel (96 hour salt spray)
ZR		zinc nickel, black (tri-valent chromium) RoHS compliant
XM	composite	electroless nickel
Z1	SST	passivate
AB	marine bronze	none (clean only)

Consult factory for other options

PANEL CUTOUT DIMENSIONS



233-382 Glenair SuperSeal™ USB 3.2 Connector with PC Tails

SuperSeal USB 3.2 connectors are IP68 open face rated and offer complete protection from environmental debris and water ingress common under harsh environmental conditions. Design meets USB 3.2 Gen 2 (Type C) benchmark data transfer rate requirements for read and write performance requirements.

Part Number Development					
Sample Part Number	233-382	NF	00	-11	N
Basic Number	233-382				
Material / Finish	See Material and Finish table				
Connector Style	00 = Receptacle, Wall Mount, with Slotted Holes D0 = Receptacle, Wall Mount, Round Holes CM = Receptacle, Wall Mount with Metric Clinch Nuts CS = Receptacle, Wall Mount, with Standard Clinch Nuts 07 = Receptacle, Jam-Nut				
Shell Size	11, 13				
Alternate Polarization	A, B, C, D, E, N = Normal				

Wall Mount Dimensions					
SHELL SIZE	A THREAD	B SQ	B' SQ	C BSC	D BSC
11	.7500-.1P-.3L-TS-2A	1.043 (26.49) 1.019 (25.88)	1.132 (28.75) 1.092 (27.74)	0.812 (20.62)	0.719 (18.26)
13	.8750-.1P-.3L-TS-2A	1.138 (28.91) 1.114 (28.30)	1.226 (31.14) 1.186 (30.12)	0.906 (23.01)	0.812 (20.62)

Jam Nut Mount & Inline Dimensions					
SHELL SIZE	F THREAD	ØG	H	J FLAT	K THREAD
11	.7500-.1P-.3L-TS-2A	1.386 (35.20) 1.362 (34.59)	1.268 (32.21) 1.236 (31.39)	0.755 (19.18) 0.745 (18.92)	M20 X 1.0-6g 0.100R
13	.8750-.1P-.3L-TS-2A	1.512 (38.40) 1.488 (37.80)	1.390 (35.31) 1.358 (34.49)	0.942 (23.93) 0.932 (23.67)	M25 X 1.0-6g 0.100R

Panel Cutout & Wall Mount Dimensions						
SHELL SIZE	ØN MIN	ØP MIN	R HOLES	S BSC	ØT	U FLAT
11	0.796 (20.22)	0.625 (15.88)	0.133 (3.38) 0.123 (3.12)	0.812 (20.62)	0.835 (21.21) 0.825 (20.96)	0.771 (19.58) 0.761 (19.33)
13	0.922 (23.42)	0.750 (19.05)		0.906 (23.01)	1.020 (25.91) 1.010 (25.65)	0.955 (24.26) 0.945 (24.00)

NOTES

1. Meets IP67 in unmated condition, IP68 mated
2. Front panel mount only
3. Operating temperature: -20°C to +85°C



USB 3.2 TYPE A CONNECTORS

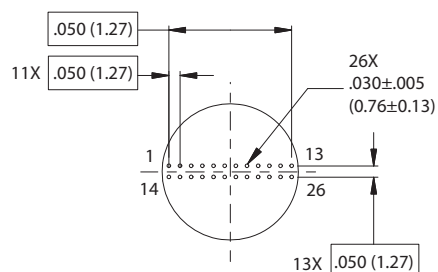
MIL-DTL-38999 Series III Type Connectors



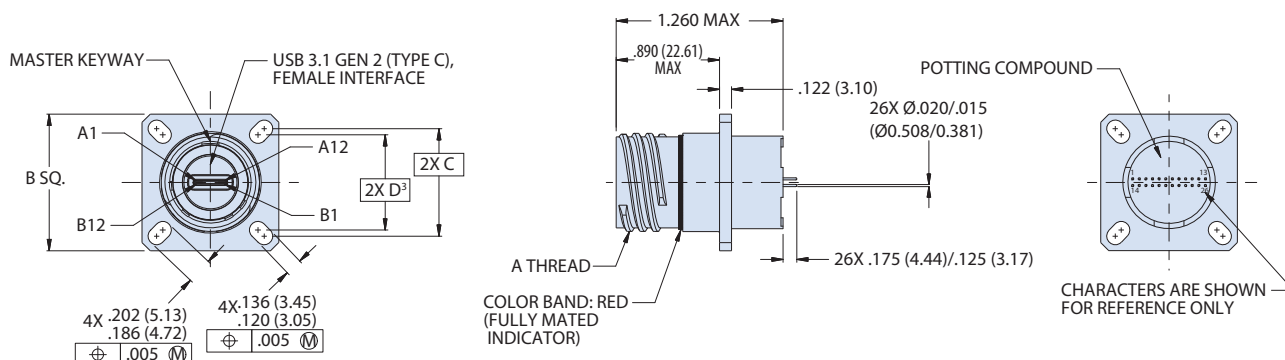
233-382 Receptacle Connector with Female USB 3.2 Gen 2 (Type C) Port to PC Tail Termination

PC TAIL PINS TO USB TYPE-C WIRING					
PC TAIL PIN	USB C PIN	NAME	PC TAIL PIN	USB C PIN	NAME
1	A4,A9,B4,B9	VBUS	14	A4,A9,B4,B9	VBUS
2	A5	cc1	15	B5	CC2
3	A8	SBU1	16	B8	SBU2
4	A11	RX2+	17	B2	TX2+
5	A10	RX2-	18	B3	TX2-
6	A1,A12,B1,B12	GND	19	A1,A12,B1,B12	GND
7	A7	D-	20	B6	D2+
8	A6	D+	21	B7	D2-
9	A1,A12,B1,B12	GND	22	A1,A12,B1,B12	GND
10	A3	TX1-	23	B10	RX1-
11	A2	TX1+	24	B11	RX1+
12	A1,A12,B1,B12	GND	25	A1,A12,B1,B12	GND
13	A4,A9,B4,B9	VBUS	26	A4,A9,B4,B9	VBUS

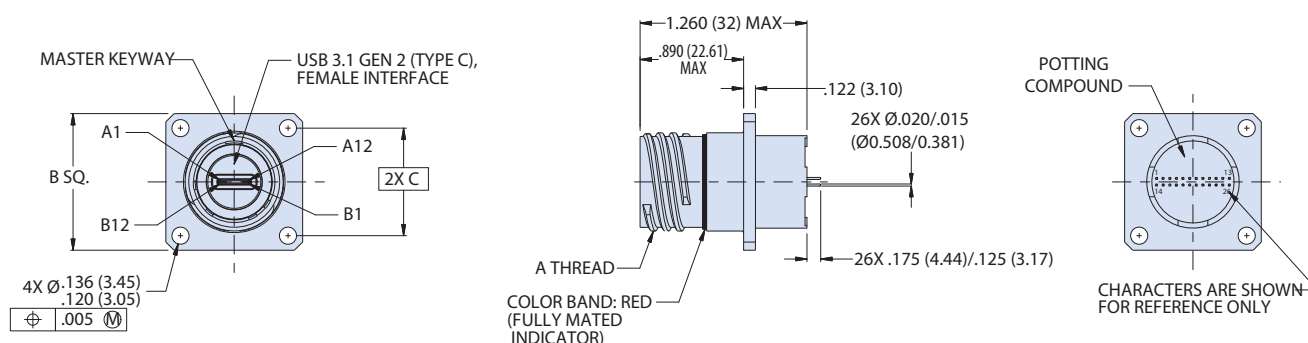
PCB LAYOUT (SOLDER SIDE)



00 - WALL MOUNT RECEPTACLE WITH SLOTTED HOLES



D0 - WALL MOUNT RECEPTACLE WITH ROUND HOLES





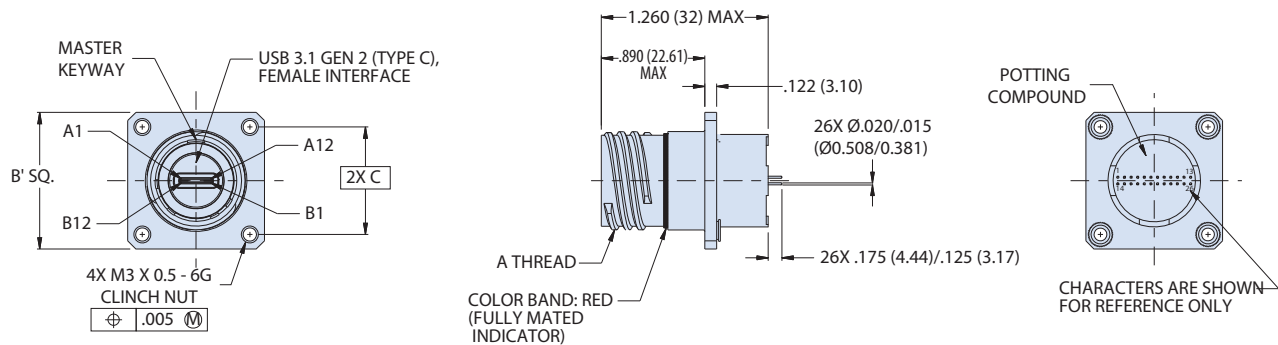
USB 3.2 TYPE A CONNECTORS

MIL-DTL-38999 Series III Type Connectors

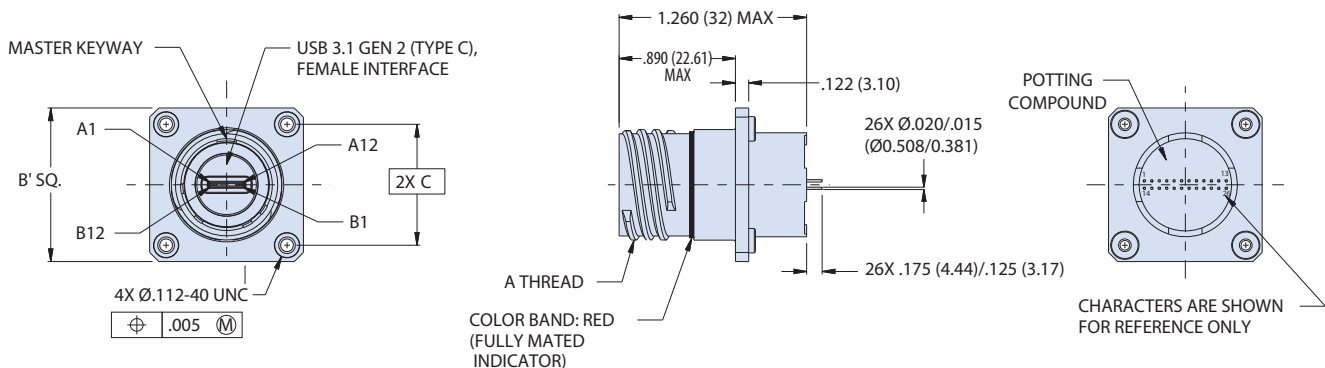


233-382 Receptacle Connector with Female USB 3.2 Gen 2 (Type C) Port to PC Tail Termination

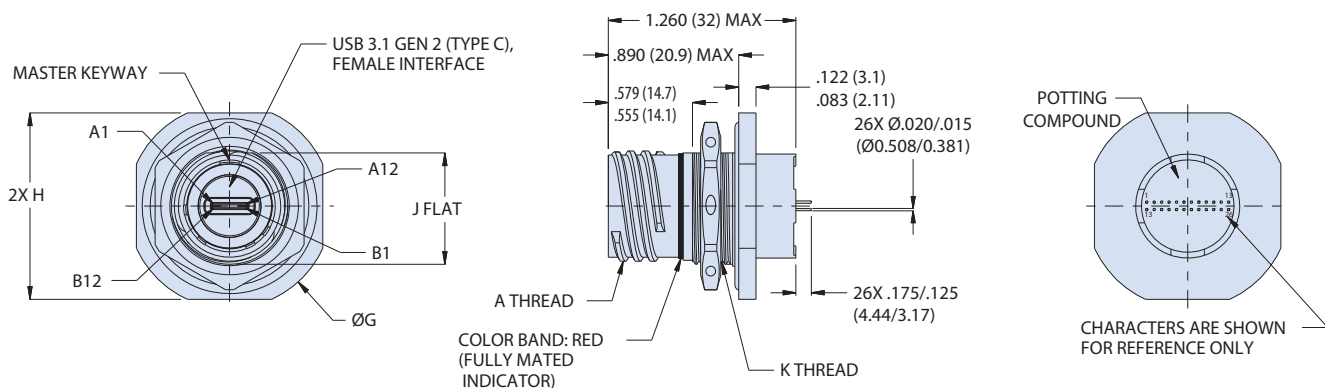
CM - WALL MOUNT RECEPTACLE WITH METRIC CLINCH NUTS



CS - WALL MOUNT RECEPTACLE WITH STANDARD CLINCH NUTS



07 - JAM NUT MOUNT RECEPTACLE





USB 3.2 TYPE A CONNECTORS

MIL-DTL-38999 Series III Type Connectors



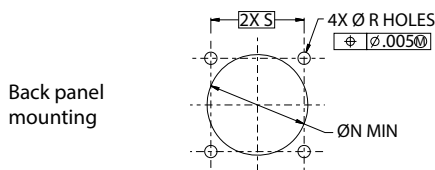
233-384 Receptacle Connector with Female USB 3.2 Gen 2 (Type C) Port to Breakout Board



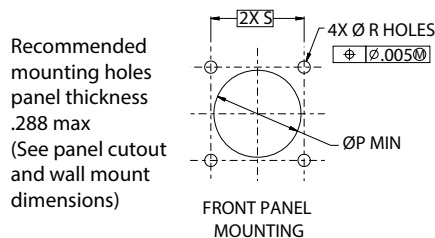
All external dimensions, features, etc. compliant with D38999/20, /24, &/26. Consult factory for additional information.

Material and Finish		
Sym.	Material	Finish Description
NF	aluminum	cadmium, olive drab
ME		electroless nickel (96 hour salt spray)
ZR		zinc nickel, black (tri-valent chromium) RoHS compliant
XM		electroless nickel
Z1	SST	passivate
AB	marine bronze	none (clean only)
Consult factory for other options		

PANEL CUTOUT DIMENSIONS



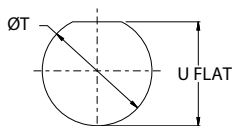
Back panel mounting



Recommended mounting holes panel thickness .288 max (See panel cutout and wall mount dimensions)

FRONT PANEL MOUNTING

Recommended panel cut out for jam-nut receptacle



233-384 Glenair SuperSeal™ USB 3.2 to Breakout Board

SuperSeal USB 3.2 connectors are IP67 open face rated and offer complete protection from environmental debris and water ingress common under harsh environmental conditions. Design meets USB 3.2 Gen 2 (Type C) benchmark data transfer rate requirements for read and write performance requirements.

Part Number Development					
Sample Part Number	233-384	NF	00	-11	N
Basic Number	233-384				
Material / Finish	See Material and Finish table				
Connector Style	00 = Receptacle, Wall Mount, with Slotted Holes D0 = Receptacle, Wall Mount, Round Holes CM = Receptacle, Wall Mount with Metric Clinch Nuts CS = Receptacle, Wall Mount, with Standard Clinch Nuts 07 = Receptacle, Jam-Nut 05 = Receptacle, Inline				
Shell Size	11, 13				
Alternate Polarization	A, B, C, D, E, N = Normal				

Wall Mount Dimensions					
SHELL SIZE	A THREAD	B SQ	B' SQ	C BSC	D BSC
11	.7500-1P-.3L-TS-2A	1.043 (26.49) 1.019 (25.88)	1.132 (28.75) 1.092 (27.74)	0.812 (20.62)	0.719 (18.26)
13	.8750-1P-.3L-TS-2A	1.138 (28.91) 1.114 (28.30)	1.226 (31.14) 1.186 (30.12)	0.906 (23.01)	0.812 (20.62)

Jam Nut Mount & Inline Dimensions					
SHELL SIZE	F THREAD	ØG	H	J FLAT	K THREAD
11	.7500-1P-.3L-TS-2A	1.386 (35.20) 1.362 (34.59)	1.268 (32.21) 1.236 (31.39)	0.755 (19.18) 0.745 (18.92)	M20 X 1.0-6g 0.100R
13	.8750-1P-.3L-TS-2A	1.512 (38.40) 1.488 (37.80)	1.390 (35.31) 1.358 (34.49)	0.942 (23.93) 0.932 (23.67)	M25 X 1.0-6g 0.100R

Panel Cutout & Wall Mount Dimensions						
SHELL SIZE	ØN MIN	ØP MIN	R HOLES	S BSC	ØT	U FLAT
11	0.796 (20.22)	0.625 (15.88)	0.133 (3.38) 0.123 (3.12)	0.812 (20.62)	0.835 (21.21) 0.825 (20.96)	0.771 (19.58) 0.761 (19.33)
13	0.922 (23.42)	0.750 (19.05)		0.906 (23.01)	1.020 (25.91) 1.010 (25.65)	0.955 (24.26) 0.945 (24.00)

NOTES

1. Meets IP67 in unmated condition, IP68 mated
2. Front panel mount only
3. Operating temperature: -20°C to +85°C



USB 3.2 TYPE A CONNECTORS

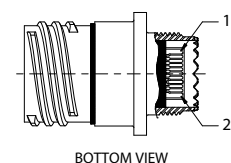
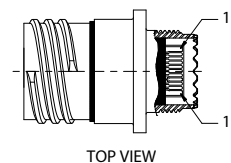
MIL-DTL-38999 Series III Type Connectors



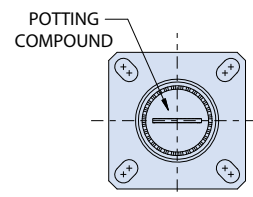
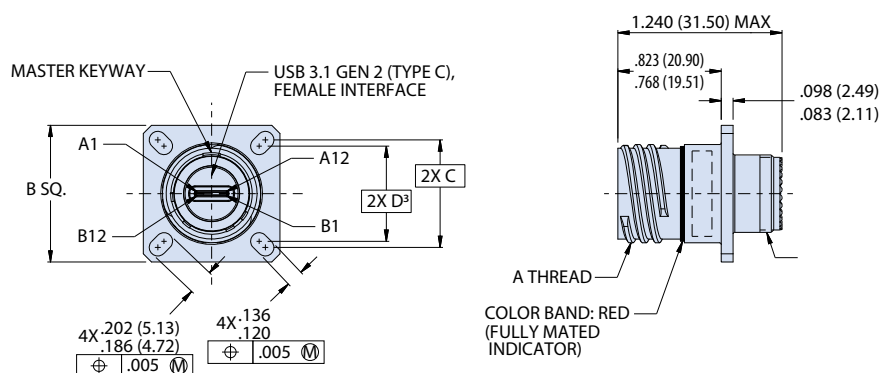
233-384 Receptacle Connector with Female USB 3.2 Gen 2 (Type C) Port to Breakout Board

USB Type-C Wiring					
PAD	PIN NAME	DESCRIPTION	PAD	PIN NAME	DESCRIPTION
1	A1,A12	GND	12	B1,B12	GND
2	A2	TX1+	13	B2	TX2+
3	A3	TX1-	14	B3	TX2-
4	A4	VBUS	15	B4	VBUS
5	A5	CC1	16	B5	CC2
6	A6	D+	17	B6	D+
7	A7	D-	18	B7	D-
8	A8	SBU1	19	B8	SBU2
9	A9	VBUS	20	B9	VBUS
10	A10	RX2-	21	B10	RX1-
11	A11	RX2+	22	B11	RX1+

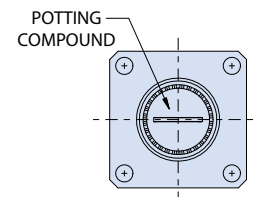
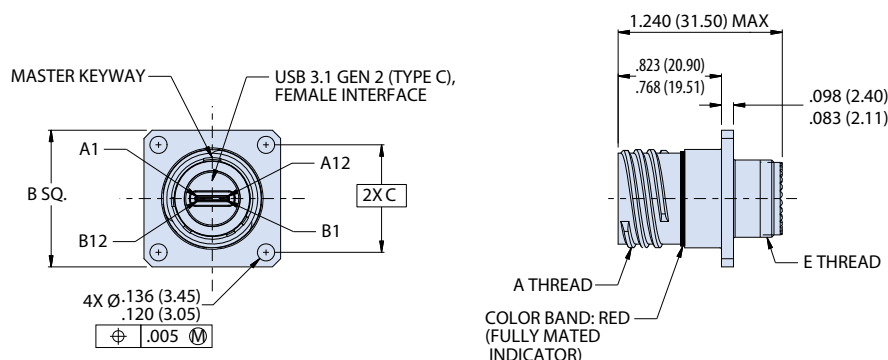
CONNECTOR PIN ASSIGNMENTS



00 - WALL MOUNT RECEPTACLE WITH SLOTTED HOLES



D0 - WALL MOUNT RECEPTACLE WITH ROUND HOLES





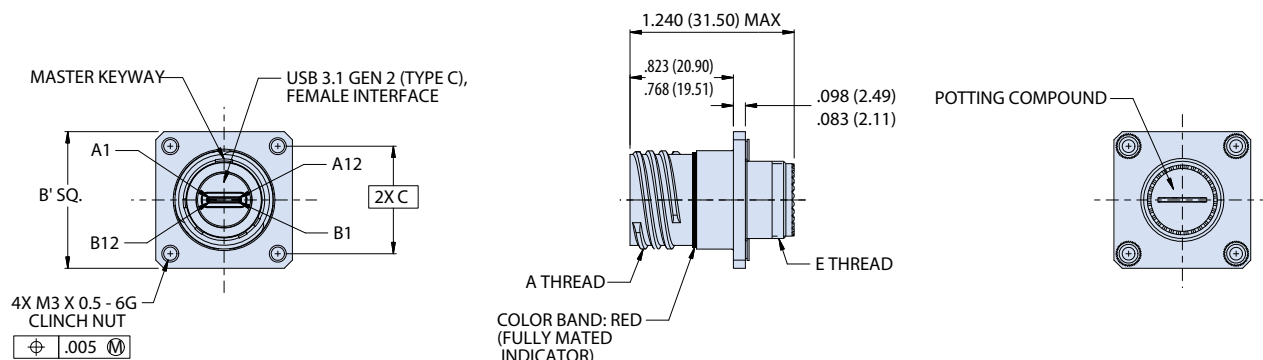
USB 3.2 TYPE A CONNECTORS

MIL-DTL-38999 Series III Type Connectors

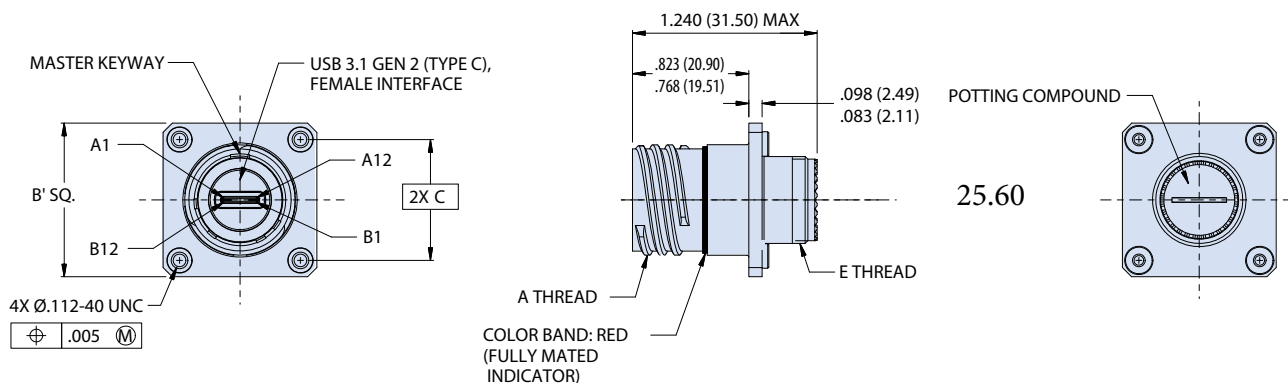


233-384 Receptacle Connector with Female USB 3.2 Gen 2 (Type C) Port to Breakout Board

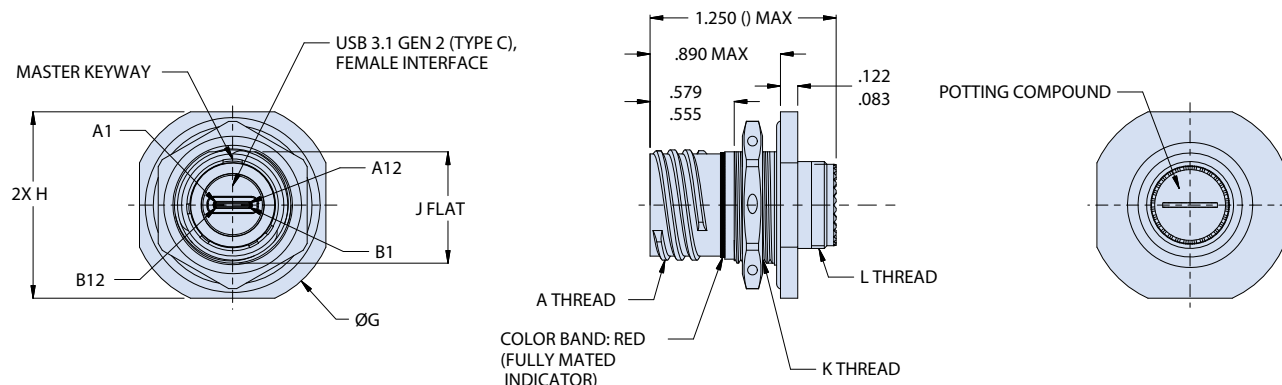
CM - WALL MOUNT RECEPTACLE WITH METRIC CLINCH NUTS



CS - WALL MOUNT RECEPTACLE WITH STANDARD CLINCH NUTS



07 - JAM NUT MOUNT RECEPTACLE





USB 3.2 TYPE A CONNECTORS

MIL-DTL-38999 Series III Type Connectors



233-388 Drive-Thru Plug Connector with Male USB 3.2 Gen 2 (Type C) Plug

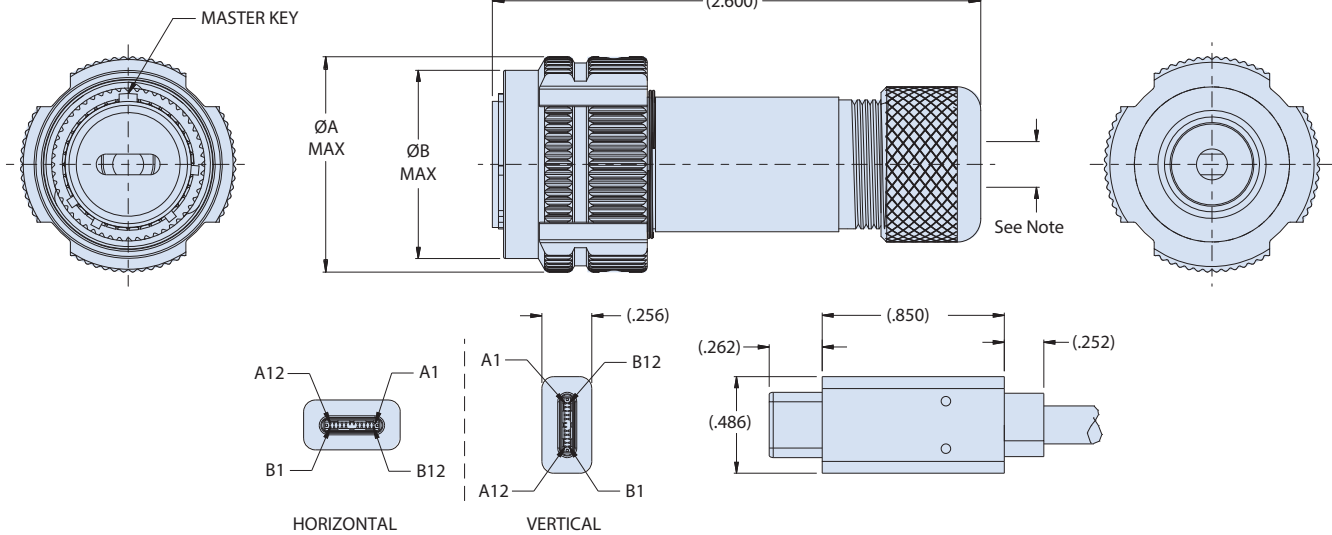


All external dimensions, features, etc. compliant with D38999/20, /24, &/26. Consult factory for additional information.

233-388 Glenair SuperSeal™ USB 3.2 Plug

SuperSeal USB 3.2 connectors are IP67 in mated condition and offer complete protection from environmental debris and water ingress common under harsh environmental conditions. Drive-thru design utilizes USB 3.2 commercially available cabled connector with nominal outside diameter of 0.189 (4.8). Meets USB 3.2 Gen 2 (Type C) benchmark data transfer rate requirements for read and write performance requirements.

Part Number Development						
Sample Part Number	233-388	NF	G6	-13	N	H
Basic Number	233-388					
Material / Finish	See Table I					
Connector Style	G6 = Plug					
Shell Size	11, 13					
Alternate Polarization	A, B, C, D, E, N = Normal					
USB Orientation	H = Horizontal V = Vertical					



Recommended USB 3.1 Type C Plug Overmold Design

Table I: Material and Finish

Table I: Material and Finish		
Sym.	Material	Finish Description
NF	Aluminum	Cadmium, Olive Drab
ME		Electroless Nickel (96 Hour Salt Spray)
Consult factory for other options		

Table II

SHELL SIZE	ØA MAX	ØB MAX
11	0.984 (24.99)	0.839 (21.31)
13	1.157 (29.39)	1.008 (25.60)

NOTES

1. IP68 in mated condition
2. Design accommodates cable outside diameter of 0.1879 (4.8) nominal
3. Operating Temperature: -40° C to +85° C

RUGGEDIZED
SERIES ITS REVERSE-
BAYONET RJ45
CAT 6A CONNECTOR



SUPERSEAL™

Harsh-environment RJ45 data transmission connectors with fast and reliable reverse-bayonet coupling for military vehicle and rail applications



Series ITS SuperSeal™ Advantages

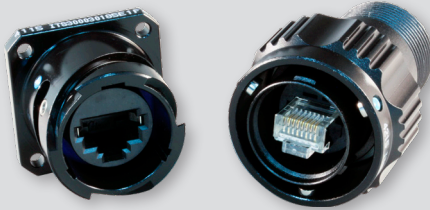
- Intermountable 5015 style reverse-bayonet connectors for heavy-duty industrial and transportation applications
- Reverse-bayonet coupling for fast, reliable mating in hard-to-reach locations
- Superior sealing—IP67 (open face) and IP68 (mated)—for complete harsh-environment protection
- Crimp contact termination or pigtail cables
- Available backshells provide strain-relief and environmental protection
- Integrated RJ45 plugs and jacks for Cat 5e high-speed data transmission



Glenair, Inc.
1211 Air Way
Glendale, CA 91201-2497
818-247-6000
sales@glenair.com
www.glenair.com



RJ45 CAT 5E ETHERNET Series ITS (5015 intermountable) Reverse Bayonet Coupling Product Selection Guide



ITS300

Page D-2

SuperSeal™ Coupler with Accessory Threads and Plug-to-Jack (Plug) or Jack-to-Jack (Receptacle).



ITS301

Page D-4

SuperSeal™ Connector with Accessory Threads and Plug (Plug) or Jack (Receptacle) to Crimp Removable Contacts.



ITS302

Page D-6

SuperSeal™ Receptacle with RJ45 Jack to PC Tail Termination.



ITS303

Page D-8

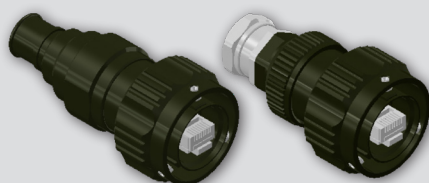
SuperSeal™ Receptacle with RJ45 Jack to Solder Cup Termination.



ITS330

Page D-10

SuperSeal™ Feedthrough Receptacle with Jack-to-Jack RJ45.



ITS300H

Page D-11

SuperSeal™ RJ45 Connector and Backshell with Accessory Options.

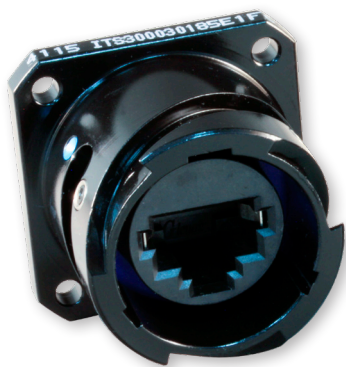


RJ45 CAT 5E ETHERNET

Series ITS (5015 type) Reverse-Bayonet

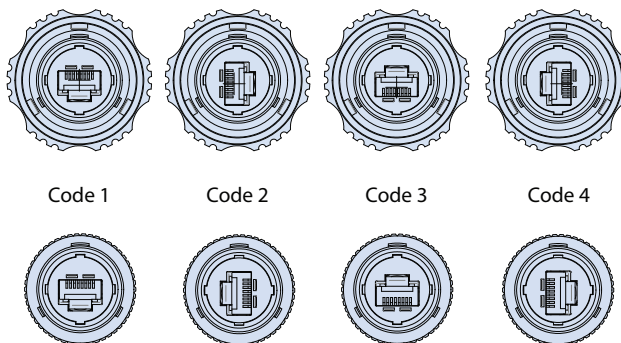


ITS300 Coupler with Accessory Threads and Plug-to-Jack (Plug) or Jack-to-Jack (Receptacle)



How to Order							
Sample Part Number	ITS300	030	G	18	5E	1	F7
Basic Number	ITS300						
Connector Style ¹	030 = Rear Panel Mount Square Flange Receptacle 01 = InLine Receptacle 070 = Rear Panel Mount Jam Nut Receptacle 06 = Straight Plug Connector						
Insert-to-Shell Grounding	G = Insert grounded to shell; available for receptacle only (for use with shielded cable) Omit = for none						
Shell Size	18						
RJ45 Category	5E = Cat 5E For Cat 6A applications consult factory						
RJ45 Orientation	1, 2, 3 or 4						
Material/Finish	Omit for Aluminum/Cadmium, Olive Drab (G3) F6 = Aluminum/Black Polymer Electrocoat F7 = Aluminum/Conductive Black Zinc Nickel F11 = Aluminum/Electroless Nickel						

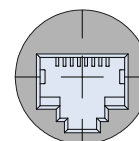
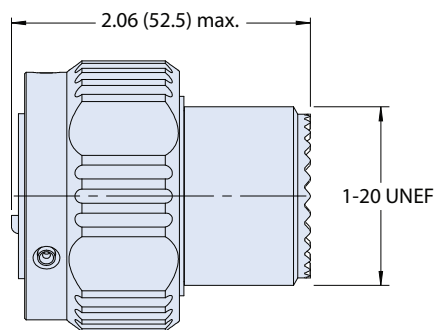
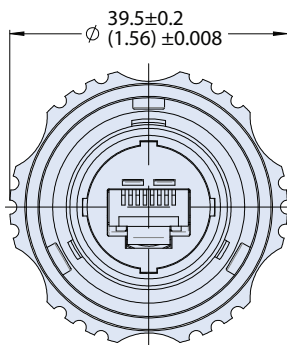
RJ45 Orientation Options



NOTES

1. See Section A for panel cutout dimensions
2. Plugs are plug/jack and receptacles are jack/jack

06 - PLUG WITH ACCESSORY THREADS



Rear Connector View with RJ45 Jack (Applies to all connector styles)



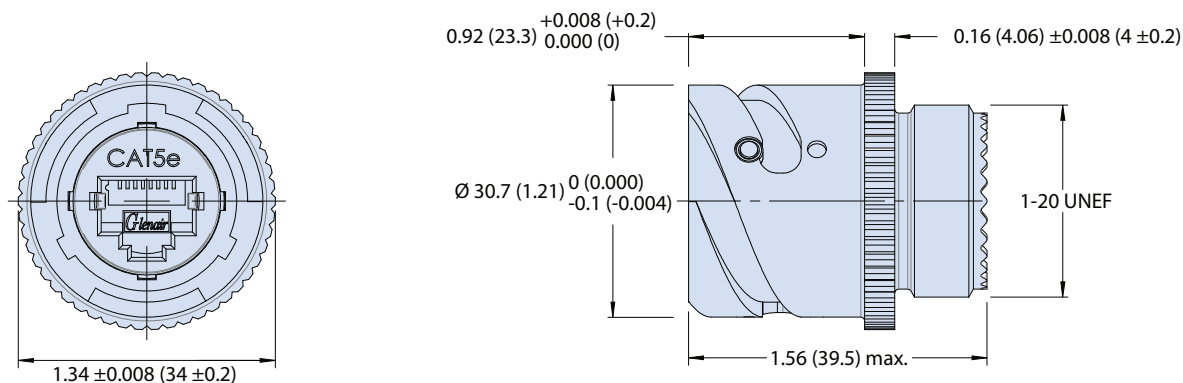
RJ45 CAT 5E ETHERNET

Series ITS (5015 type) Reverse-Bayonet

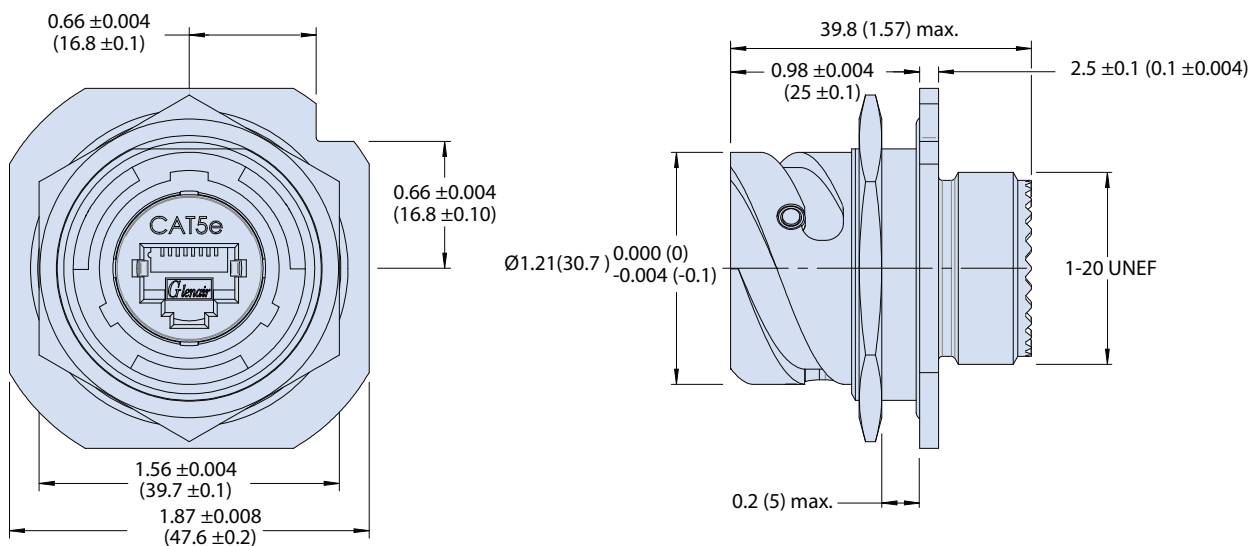


ITS300 Coupler with Accessory Threads and Plug-to-Jack (Plug) or Jack-to-Jack (Receptacle)

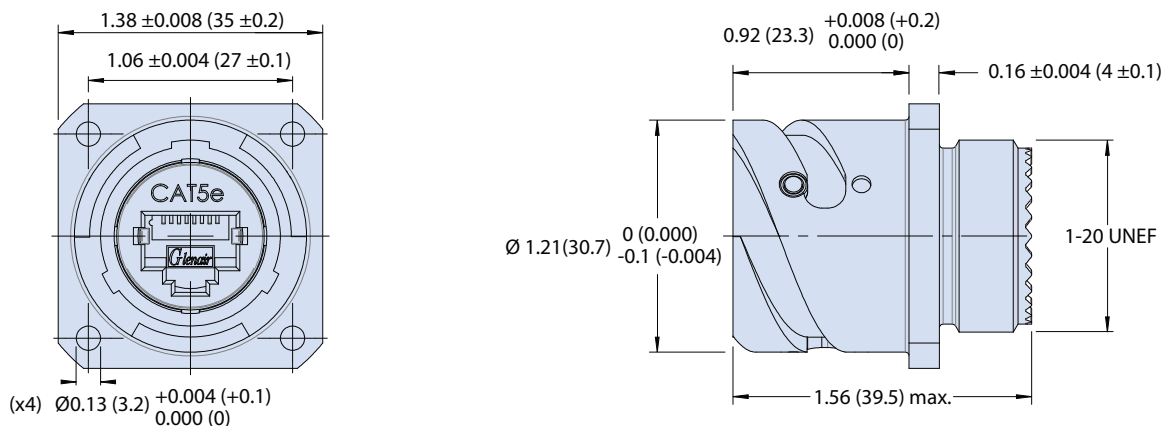
01 - INLINE RECEPTACLE WITH ACCESSORY THREADS



070 - REAR PANEL MOUNT JAM NUT RECEPTACLE WITH ACCESSORY THREADS



030 - REAR PANEL MOUNT SQUARE FLANGE RECEPTACLE WITH ACCESSORY THREADS





RJ45 CAT 5E ETHERNET

Series ITS (5015 type) Reverse-Bayonet

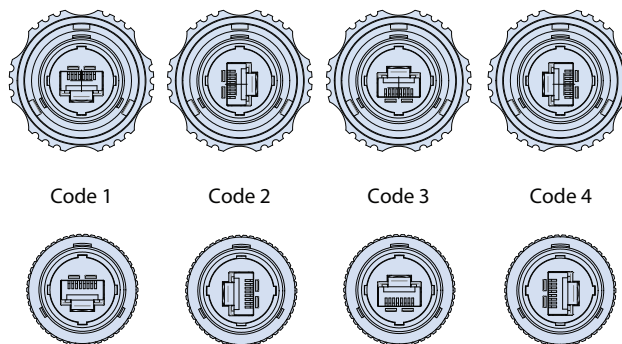


ITS301 Connector with Accessory Threads and Plug (Plug) or Jack (Receptacle) to Crimp Removable Contacts



How to Order							
Sample Part Number	ITS301	030	G	18	5E	1	F7
Basic Number	ITS301						
Connector Style ¹	030 = Rear Panel Mount Square Flange Receptacle 01 = InLine Receptacle 070 = Rear Panel Mount Jam Nut Receptacle 06 = Straight Plug Connector						
Insert-to-Shell Grounding	G = Insert grounded to shell; available for receptacle only (for use with shielded cable) Omit = for none						
Shell Size	18						
RJ45 Category	5E = Cat 5E For Cat 6A applications consult factory						
RJ45 Orientation	1, 2, 3 or 4						
Material/Finish	Omit for Aluminum/Cadmium, Olive Drab (G3) F6 = Aluminum/Black Polymer Electrocoat F7 = Aluminum/Conductive Black Zinc Nickel F11 = Aluminum/Electroless Nickel						

RJ45 Orientation Options



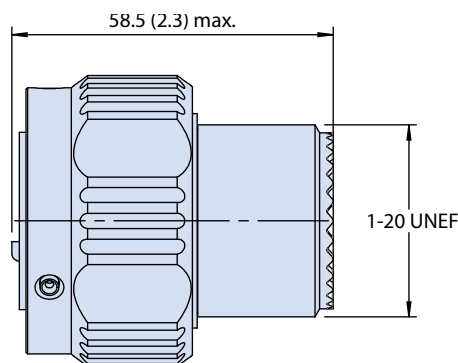
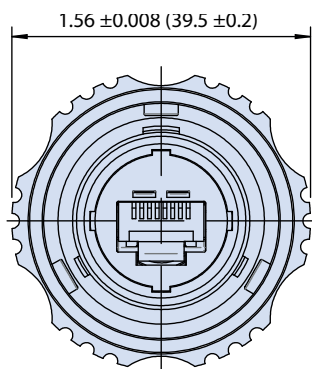
Plug

Receptacle
(In-Line Shown)

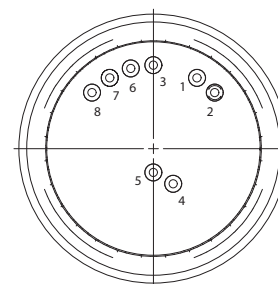
NOTES

1. See Section A for panel cutout dimensions
2. Crimp removable size 22 contacts (M39029/58-360) supplied loose

06 - PLUG WITH ACCESSORY THREADS



PLUG AND RECEPTACLE REAR TERMINATION VIEW





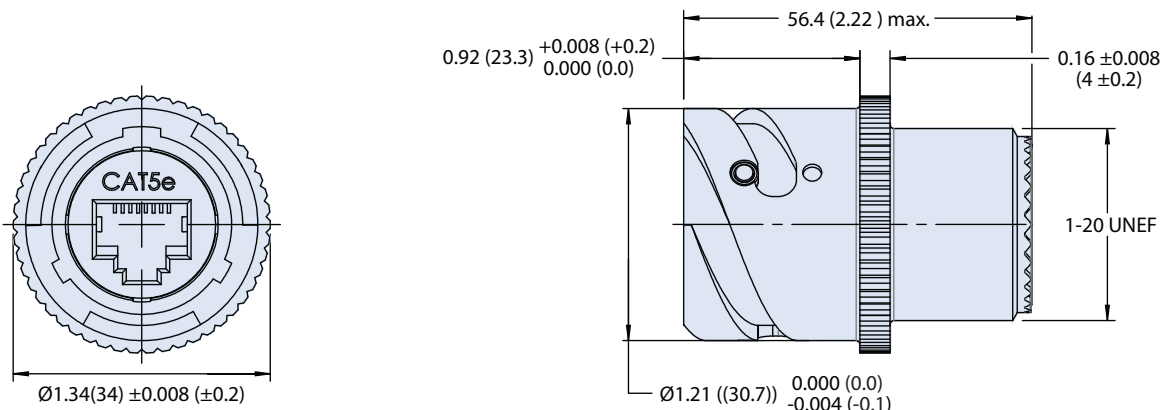
RJ45 CAT 5E ETHERNET

Series ITS (5015 type) Reverse-Bayonet

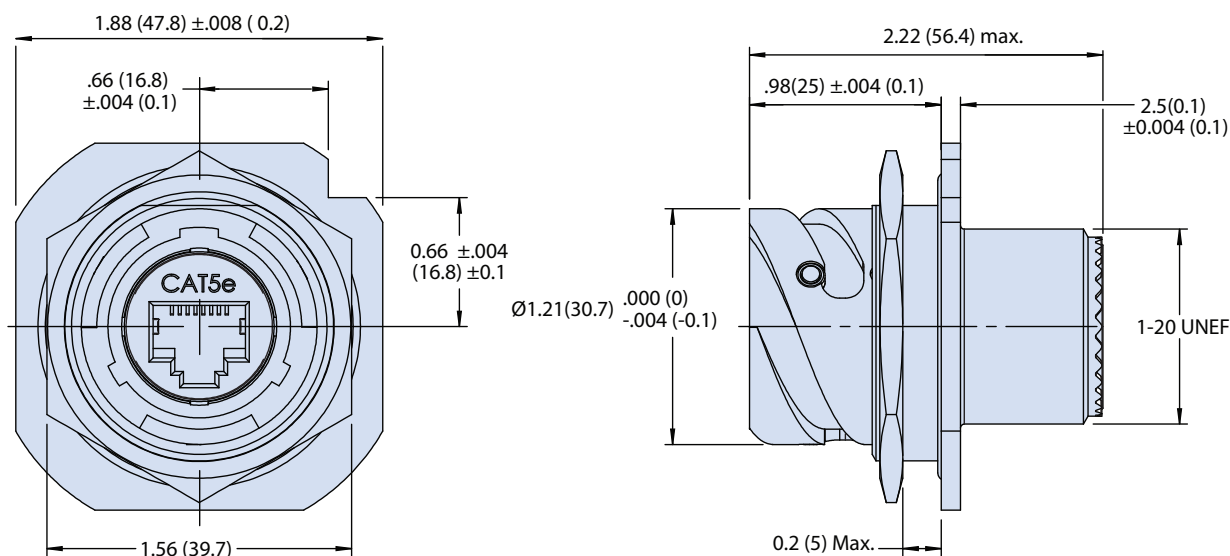


ITS301 Connector with Accessory Threads and Plug (Plug) or Jack (Receptacle) to Crimp Removable Contacts

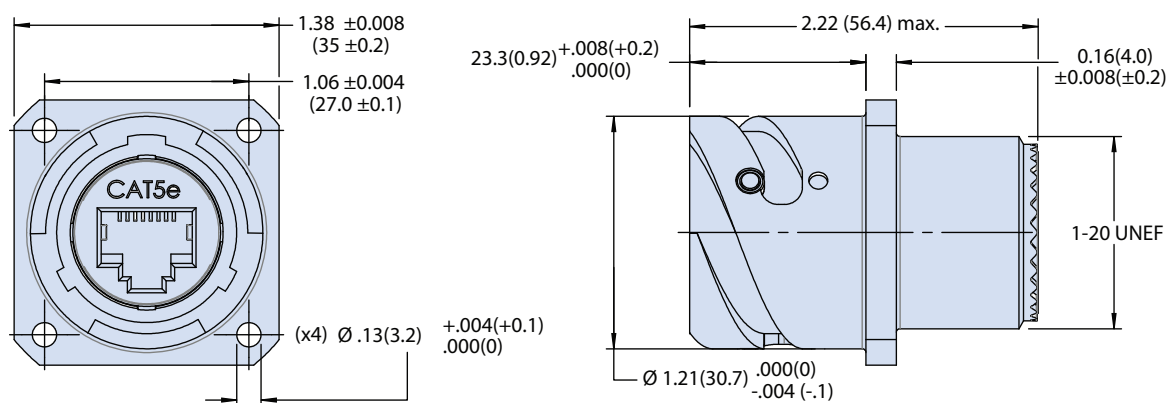
01 - INLINE RECEPTACLE WITH ACCESSORY THREADS



070 - REAR PANEL MOUNT JAM NUT RECEPTACLE WITH ACCESSORY THREADS

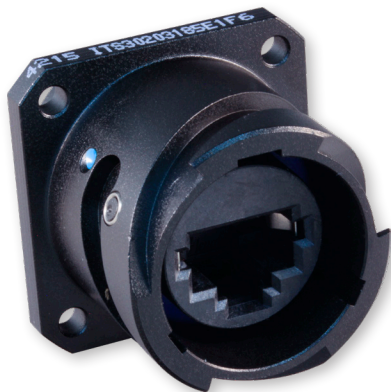


030 - REAR PANEL MOUNT SQUARE FLANGE RECEPTACLE WITH ACCESSORY THREADS





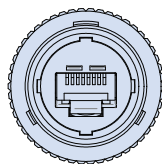
RJ45 CAT 5E ETHERNET Series ITS (5015 type) Reverse-Bayonet ITS302 Receptacle with RJ45 Jack to PC Tail Termination



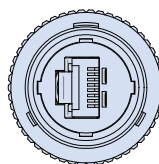
How to Order							
Sample Part Number	ITS302	03	G	18	5E	1	F7
Basic Number	ITS302						
Connector Style ¹	03 = Rear Panel Mount Square Flange Receptacle 07 = Rear Panel Mount Jam Nut Receptacle						
Insert-to-Shell Grounding	G = Insert grounded to shell (for use with shielded cable) (Use only with G3, F11 or F7 finish) Omit = for none						
Shell Size	18						
RJ45 Category	5E = Cat 5E For Cat 6A applications consult factory						
RJ45 Orientation	1, 2, 3 or 4						
Material/Finish	Omit for Aluminum/Cadmium, Olive Drab (G3) F6 = Aluminum/Black Polymer Electrocoat F7 = Aluminum/Conductive Black Zinc Nickel F11 = Aluminum/Electroless Nickel						

RJ45 Orientation Options for Receptacle

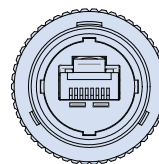
(In-line shell style shown for reference only, shell style not available)



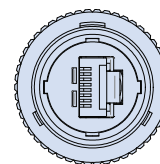
Code 1



Code 2

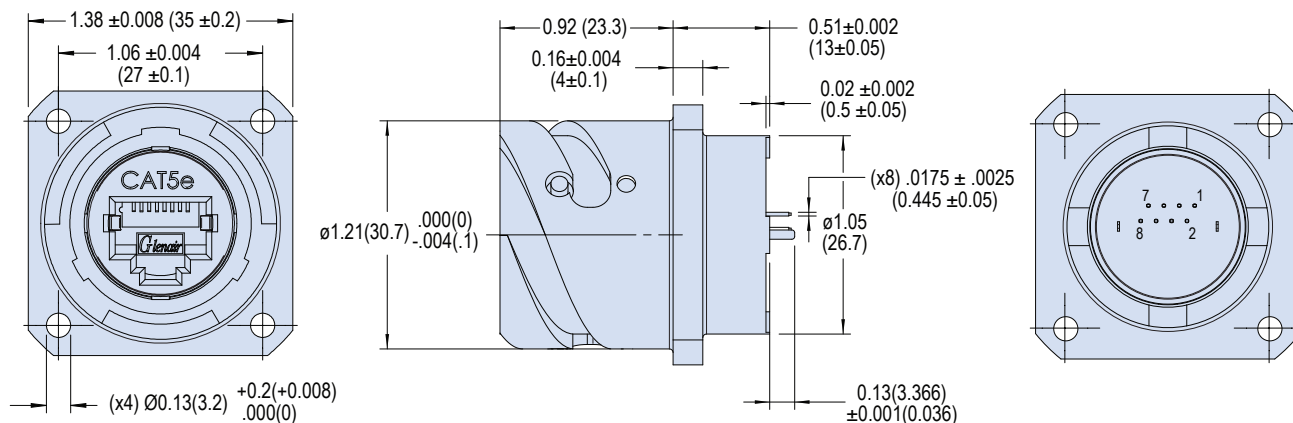


Code 3



Code 4

03 - REAR PANEL MOUNT SQUARE FLANGE RECEPTACLE

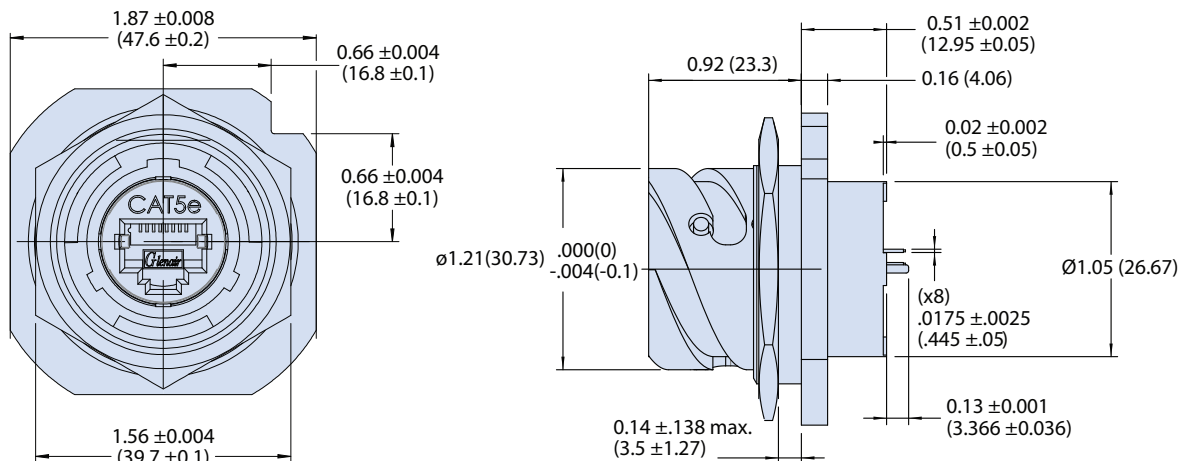




RJ45 CAT 5E ETHERNET Series ITS (5015 type) Reverse-Bayonet ITS302 Receptacle with RJ45 Jack to PC Tail Termination

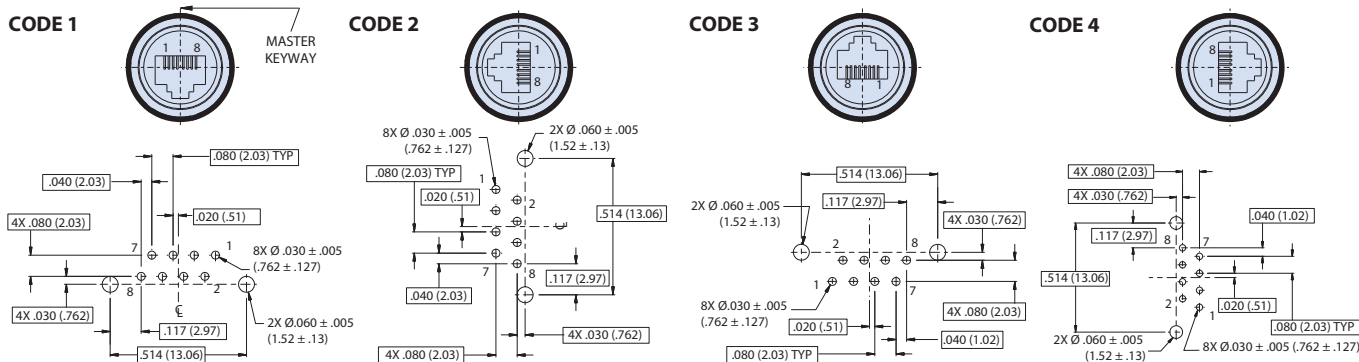


07 - REAR PANEL MOUNT JAM NUT RECEPTACLE



Receptacle RJ45 Orientation Code

Recommended PCB Layout
(Solder Side Of Board)



NOTES

1. See Section A for panel cutout dimensions, PCB footprints



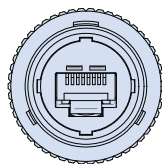
RJ45 CAT 5E ETHERNET Series ITS (5015 type) Reverse-Bayonet ITS303 Receptacle with RJ45 Jack to Solder Cup Termination



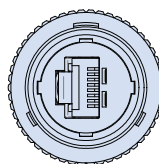
How to Order							
Sample Part Number	ITS303	03	G	18	5E	1	F7
Basic Number	ITS303						
Connector Style ¹	03 = Rear Panel Mount Square Flange Receptacle 07 = Rear Panel Mount Jam Nut Receptacle						
Insert-to-Shell Grounding	G = Insert grounded to shell (for use with shielded cable) (Use only with G3, F11 or F7 finish) Omit = for none						
Shell Size	18						
RJ45 Category	5E = Cat 5E For Cat 6A applications consult factory						
RJ45 Orientation	1, 2, 3 or 4						
Material/Finish	Omit for Aluminum/Cadmium, Olive Drab (G3) F6 = Aluminum/Black Polymer Electrocoat F7 = Aluminum/Conductive Black Zinc Nickel F11 = Aluminum/Electroless Nickel						

RJ45 Orientation Options for Receptacle

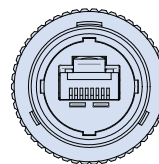
(In-line shell style shown for reference only, shell style not available)



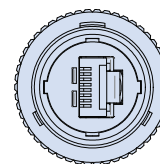
Code 1



Code 2



Code 3

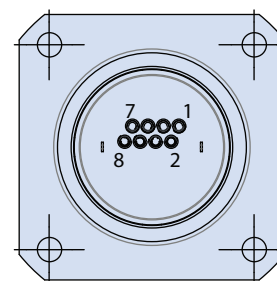
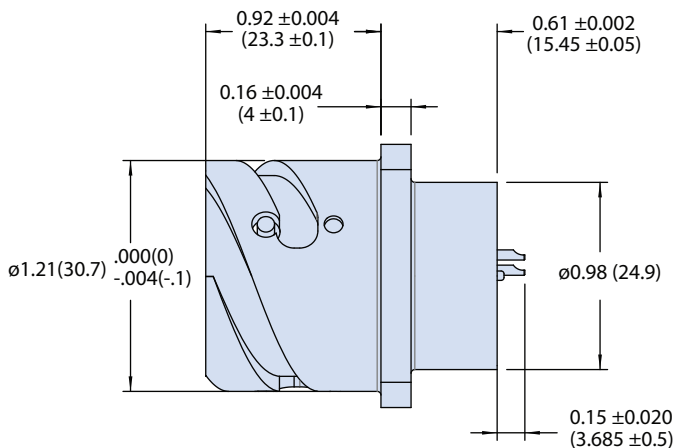
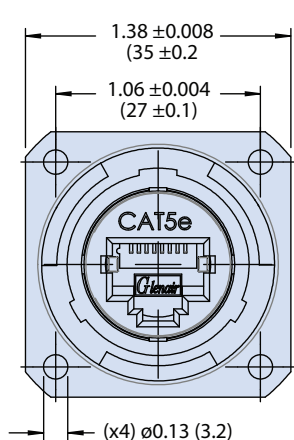


Code 4

NOTES

- See Section A for panel cutout dimensions

03 - REAR PANEL MOUNT SQUARE FLANGE RECEPTACLE



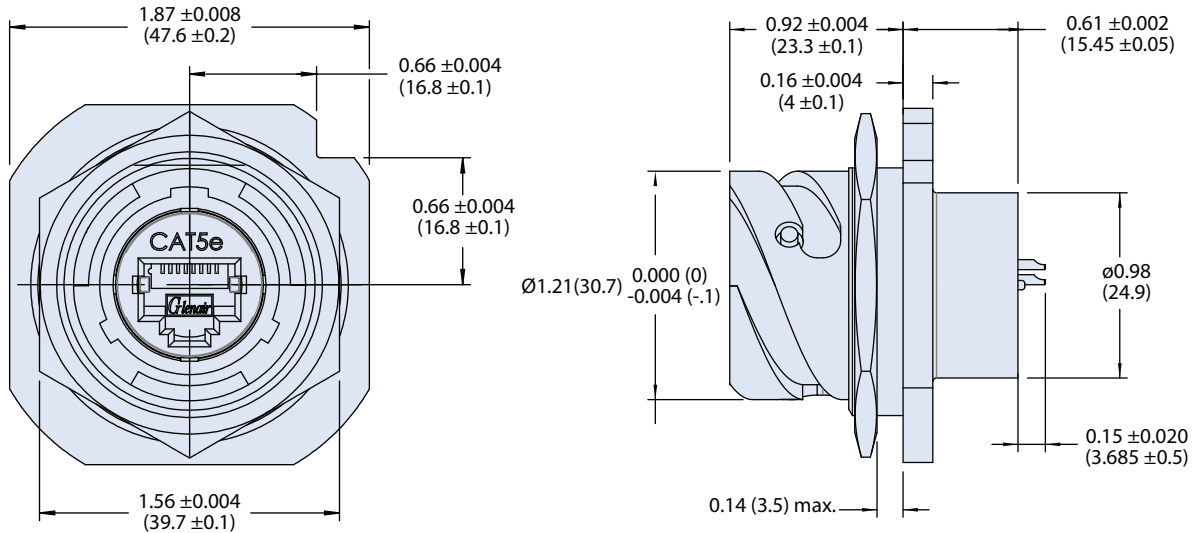
Solder Cup Layout



RJ45 CAT 5E ETHERNET
Series ITS (5015 type) Reverse-Bayonet
ITS303 Receptacle with
RJ45 Jack to Solder Cup Termination



07 - REAR PANEL MOUNT JAM NUT RECEPTACLE



D



RJ45 CAT 5E ETHERNET

Series ITS (5015 type) Reverse-Bayonet



ITS330 Feedthrough Receptacle with Jack-to-Jack RJ45



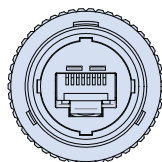
How to Order						
Sample Part Number	ITS330	03PP	18	5E	1	F7
Basic Number	ITS330					
Connector Style ¹	03PP = Rear Panel Mount Receptacle					
Shell Size	18					
RJ45 Category	5E = Cat 5E For Cat 6A applications consult factory					
RJ45 Orientation	1, 2, 3 or 4					
Material/Finish	Omit for Aluminum/Cadmium, Olive Drab (G3) F6 = Aluminum/Black Polymer Electrocoat F7 = Aluminum/Conductive Black Zinc Nickel F11 = Aluminum/Electroless Nickel					

NOTES

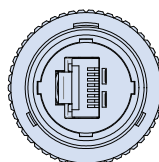
- See Section A panel cutout dimensions and complete material and finish options

RJ45 Orientation Options for Receptacle

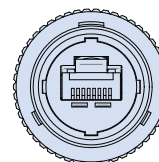
(In-line shell style shown for reference only, shell style not available)



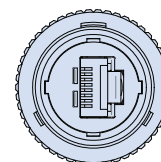
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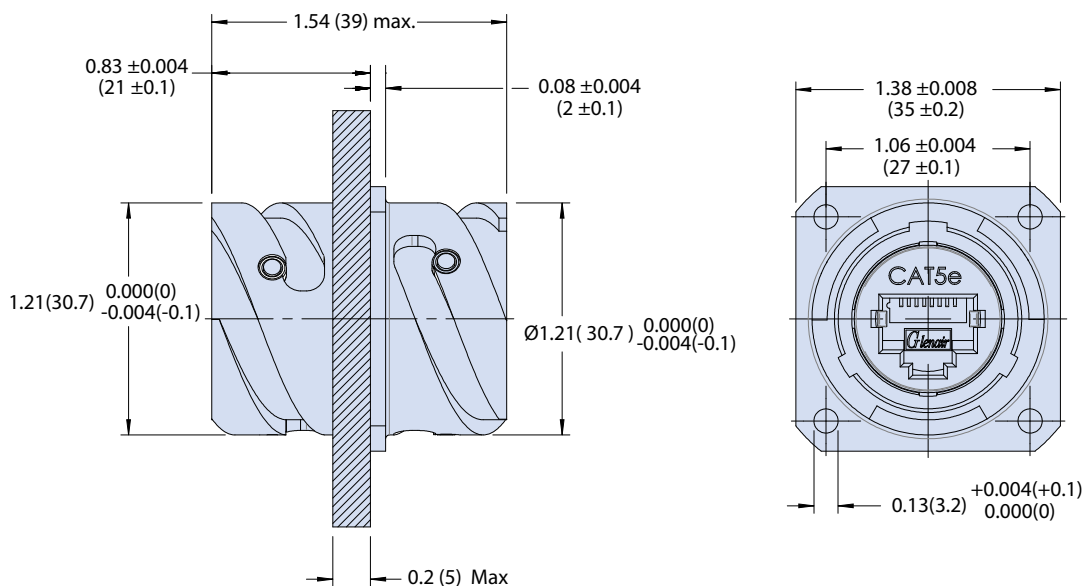
Code 2



Code 3



Code 4

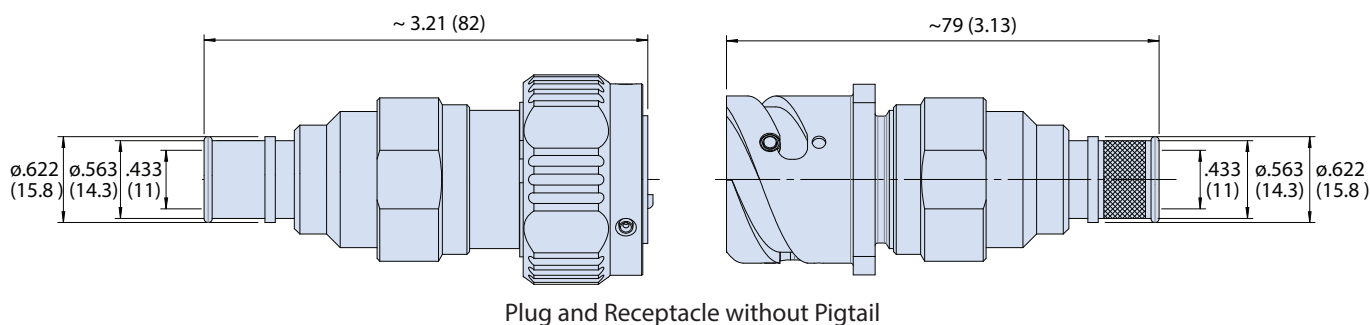




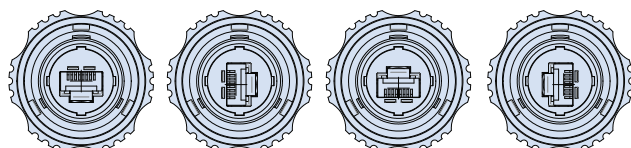
RJ45 CAT 5E ETHERNET Series ITS (5015 type) Reverse-Bayonet ITS300H Connector and Backshell with Banding Porch and Shrink Boot Groove



How to Order		ITS300H	030	G	18	5E	1	ZL	F7
Sample Part Number									
Basic Number	ITS300H								
Connector Style	030 = Rear Panel Mount Square Flange Receptacle 01 = InLine Receptacle 070 = Rear Panel Mount Jam Nut Receptacle 06 = Straight Plug Connector								
Insert-to-Shell Grounding	G = Insert grounded to shell (for use with shielded cable) (Use only with G3, F11 or F7 finish) Omit = for none								
Shell Size	18								
RJ45 Category	5E = Cat 5E For Cat 6A applications consult factory								
RJ45 Orientation	1, 2, 3 or 4								
Backshell	ZL = With banding platform for direct attachment of cable shield and shrinkboot								
Material/Finish	Omit for Aluminum/Cadmium, Olive Drab (G3) F7 = Aluminum/Conductive Black Zinc Nickel F6 = Aluminum/Black Polymer Electrocoat F11 = Aluminum/Electroless Nickel								



RJ45 Plug Orientation Options



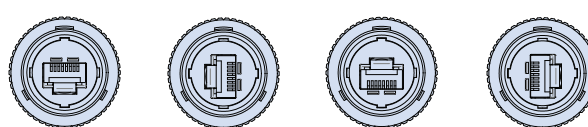
Code 1

Code 2

Code 3

Code 4

RJ45 Receptacle Orientation Options



Code 1

Code 2

Code 3

Code 4

HEAT SHRINK BOOT



Glenair P/N : **770-004S903W2**

Must be ordered separately

Type 9 flexible polyolefin short profile boots have an operating temperature range of -40°C to 100°C and provide very good resistance to fuels, oils and solvents. These boots fit most standard boot adapters for circular connectors and are specifically designed for low temperature rated CAT5e and USB cables.

NOTES

1. See Section A panel cutout dimensions

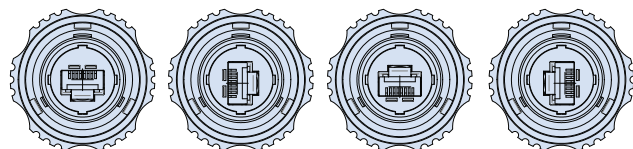


RJ45 CAT 5E ETHERNET Series ITS (5015 type) Reverse-Bayonet ITS300H Connector and Backshell with Pigtail



How to Order									
Sample Part Number		ITS300H	030	G	18	5E	1	ZL	0.5 F7
Basic Number	ITS300H								
Connector Style ¹	030 = Rear Panel Mount Square Flange Receptacle 01 = InLine Receptacle 070 = Rear Panel Mount Jam Nut Receptacle 06 = Straight Plug Connector								
Insert-to-Shell Grounding	G = Insert grounded to shell; available for receptacle only (for use with shielded cable) Omit = for none								
Shell Size	18								
Cable Category	5E = Cat 5E For Cat 6A applications consult factory								
RJ45 Orientation	1, 2, 3 or 4								
Backshell	ZL = With banding platform for direct attachment of cable shield and shrinkboot pre-installed								
Cable Length	0.5 = 0.5 meter (20 inch) increments								
Material/Finish	Omit for Aluminum/Cadmium, Olive Drab (G3) F6 = Aluminum/Black Polymer Electrocoat F7 = Aluminum/Conductive Black Zinc Nickel F11 = Aluminum/Electroless Nickel 								

RJ45 Plug Orientation Options



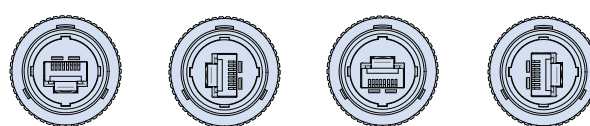
Code 1

Code 2

Code 3

Code 4

RJ45 Receptacle Orientation Options



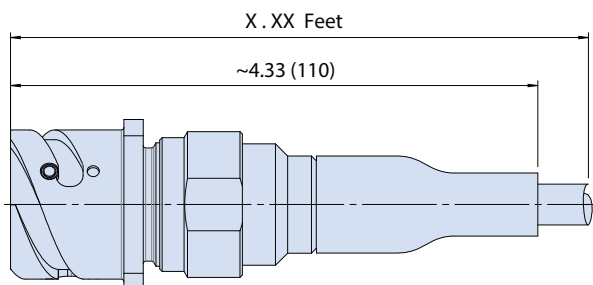
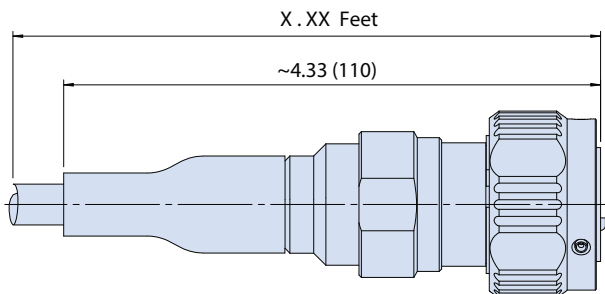
Code 1

Code 2

Code 3

Code 4

Plug and Receptacle with Pigtail



NOTES

1. See Section A panel cutout dimensions

Cable length to be ordered in 20in (0.5 mt) increments

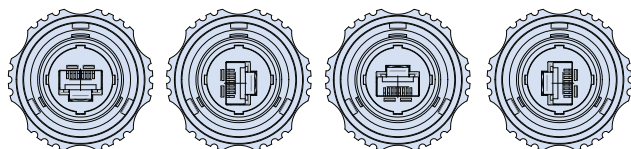


RJ45 CAT 5E ETHERNET Series ITS (5015 type) Reverse-Bayonet ITS300H Connector and Backshell with Cable Gland Backshell



How to Order									
Sample Part Number		ITS300H	030	G	18	5E	1	M	F7
Basic Number	ITS300H								
Connector Style ¹	030 = Rear Panel Mount Square Flange Receptacle 01 = InLine Receptacle 070 = Rear Panel Mount Jam Nut Receptacle 06 = Straight Plug Connector								
Insert-to-Shell Grounding	G = Insert grounded to shell; available for receptacle only (for use with shielded cable) Omit = for none								
Shell Size	18								
RJ45 Category	5E = Cat 5E For Cat 6A applications consult factory								
RJ45 Orientation	1, 2, 3 or 4								
Backshell with Internal Thread	M = M16 x 1.5 PG = PG9								
Material/Finish	Omit for Aluminum/Cadmium, Olive Drab (G3) F6 = Aluminum/Black Polymer Electrocoat		F7 = Aluminum/Conductive Black Zinc Nickel F11 = Aluminum/Electroless Nickel						

RJ45 Plug Orientation Options



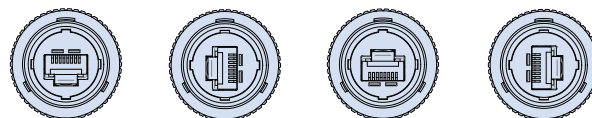
Code 1

Code 2

Code 3

Code 4

RJ45 Receptacle Orientation Options

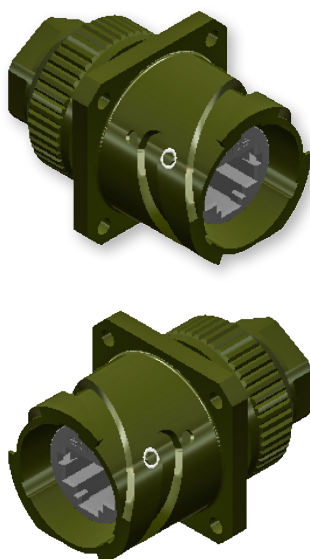


Code 1

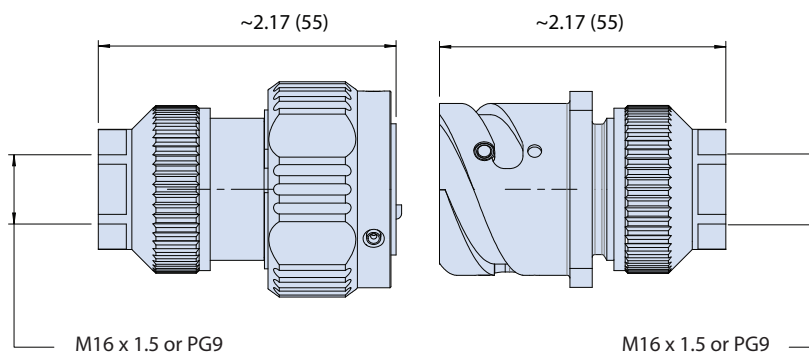
Code 2

Code 3

Code 4



Plug and Receptacle internal threaded backshell without Cable Gland
(Other Backshells option are available, please consult the factory)



NOTES

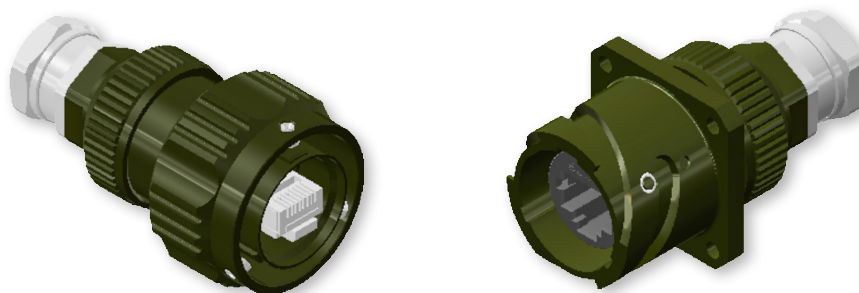
1. See Section A panel cutout dimensions



RJ45 CAT 5E ETHERNET Series ITS (5015 type) Reverse-Bayonet ITS300H Connector and Backshell with Metallic Cable Gland with or without Pigtails



How to Order									
Sample Part Number		ITS300H	030	G	18	5E	1	MS1	0.5 F6
Basic Number	ITS300H								
Connector Style ¹	030 = Rear Panel Mount Square Flange Receptacle 01 = InLine Receptacle 070 = Rear Panel Mount Jam Nut Receptacle 06 = Straight Plug Connector								
Insert-to-Shell Grounding	G = Insert grounded to shell; available for receptacle only (for use with shielded cable) Omit = for none								
Shell Size	18								
RJ45 Category	5E = Cat 5E For Cat 6A applications consult factory								
RJ45 Orientation	1, 2, 3 or 4								
Metallic Cable Gland	See Metallic Cable Gland Table								
Cable Length	0.5 = 0.5 meter (20 inch) increments Omit for none								
Material/Finish	Omit for Aluminum/Cadmium, Olive Drab (G3) F6 = Aluminum/Black Polymer Electrocoat F7 = Aluminum/Conductive Black Zinc Nickel F11 = Aluminum/Electroless Nickel								



Metallic Cable Gland		
Type	Cable Range in(mm)	Shield
M1	.24-.31 (6 - 8)	No
M2	.31 - .40 (8 - 10)	No
MS1	.24-.31 (6 - 8)	Yes
MS2	.31-.40 (8 - 10)	Yes

NOTES

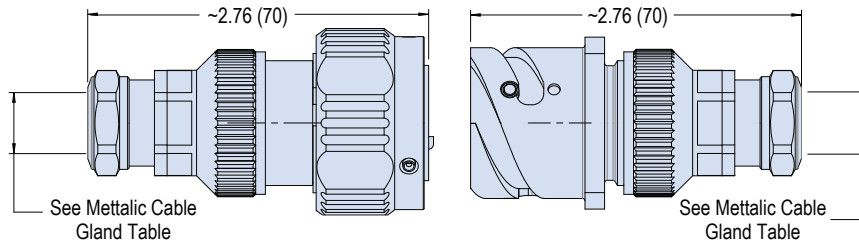
1. See Section A panel cutout dimensions



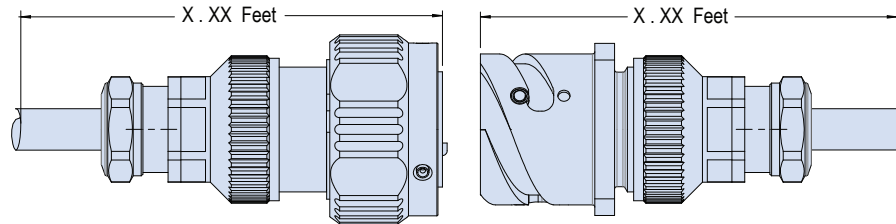
RJ45 CAT 5E ETHERNET Series ITS (5015 type) Reverse-Bayonet ITS300H Connector and Backshell with Metallic Cable Gland with or without Pigtails



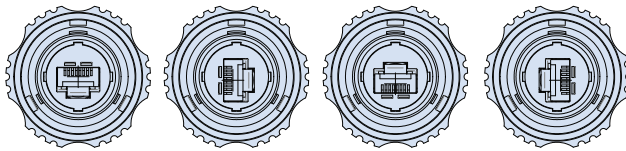
PLUG AND RECEPTACLE WITHOUT PIGTAIL



PLUG AND RECEPTACLE WITH PIGTAIL



RJ45 Plug Orientation Options



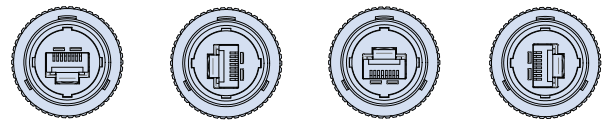
Code 1

Code 2

Code 3

Code 4

RJ45 Receptacle Orientation Options



Code 1

Code 2

Code 3

Code 4

D

MIL-DTL-5015 TYPE
FIELD-READY
USB 2.0

SUPERSEAL™

Rugged environmental 5015 intermountable reverse bayonet connectors with IP67 sealing, robust insert-to-shell grounding, and complete range of wire, cable, and PCB terminations



Series ITS SuperSeal™ Advantages

- Intermountable 5015 style reverse-bayonet connectors for heavy-duty industrial and transportation applications
- Superior sealing—IP67 open face and IP68 mated — for complete system protection against water, sand and dust
- Highly durable USB design, including enhanced operating temperature, increased life-cycle, and rugged vibration and shock performance
- Crimp, solder-cup, PC-tail, and wire termination options
- USB 2.0 plug and receptacle versions
- Available backshells provide strain-relief and environmental protection



Glenair, Inc.
1211 Air Way
Glendale, CA 91201-2497
818-247-6000
sales@glenair.com
www.glenair.com



USB 2.0 TYPE A
Series ITS (5015 intermountable)
Reverse Bayonet Coupling
Product Selection Guide



ITS340

Page E-2

SuperSeal™ Coupler with Accessory Threads and USB Male-to-Female (Plug) or Female-to-Female (Receptacle).



ITS342

Page E-4

SuperSeal™ Receptacle with USB Female Interface to PC Tail Termination.



ITS343

Page E-5

SuperSeal™ Receptacle with USB Female Interface to Solder Cup Termination.



ITS345

Page E-6

SuperSeal™ Connectors with Accessory Threads and USB Male (Plug) or Female (Receptacle) to Crimp Removable Contacts.



ITS370

Page E-8

SuperSeal™ Feedthrough Receptacle with USB Female-to-Female Interface.



ITS340H

Page E-9

SuperSeal™ Connector and Backshell with Accessory Options.



USB 2.0 TYPE A

Series ITS (5015 type) Reverse-Bayonet



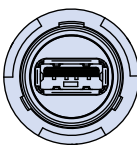
ITS340 Coupler with Accessory Threads and USB
Male-to-Female (Plug) or Female-to-Female (Receptacle)



How to Order								
Sample Part Number	ITS340	030	16	2	A	A	H	F6
Basic Number	ITS340							
Connector Style ¹	06 = Plug with Accessory Thread 01 = InLine Receptacle with Accessory Thread 070 = Rear Panel Mount Jam Nut Receptacle with Accessory Thread 030 = Rear Panel Mount Square Flange Receptacle with Accessory Thread							
Shell Size	16							
USB Performance	2 = 2.0							
USB Front Interface Type	A = Type A							
USB Rear Interface Type	A = Type A							
USB Orientation	H = Horizontal V = Vertical							
Material/Finish	Omit for Aluminum/Cadmium, Olive Drab (G3) F6 = Aluminum/Black Polymer Electrocoat F7 = Aluminum/Conductive Black Zinc Nickel F11 = Aluminum/Electroless Nickel							

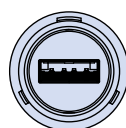
USB Orientation Options

Receptacle



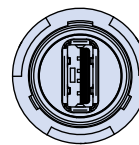
Horizontal

Plug



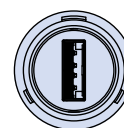
Horizontal

Receptacle



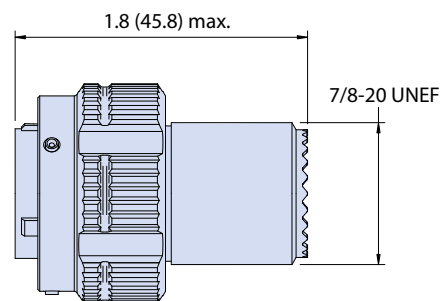
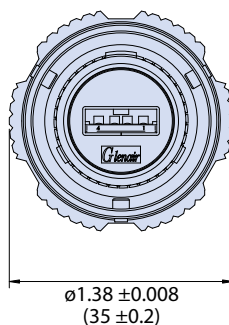
Vertical

Plug



Vertical

06 - PLUG WITH ACCESSORY THREADS



NOTES

1. See Section A for panel cutout dimensions and finish plating options



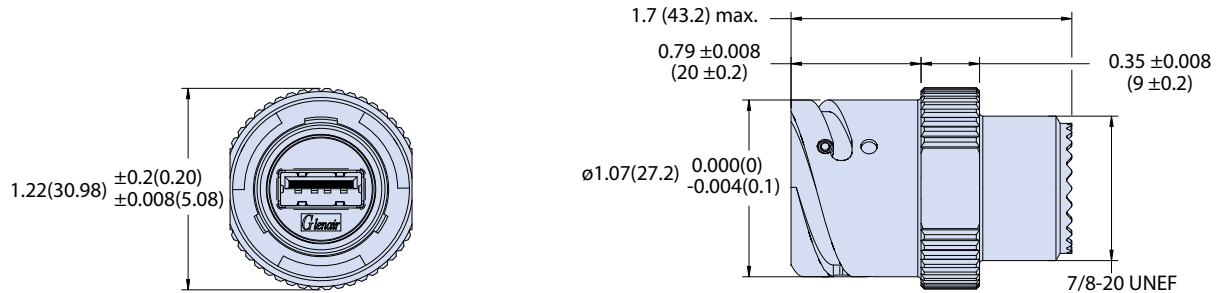
USB 2.0 TYPE A

Series ITS (5015 type) Reverse-Bayonet

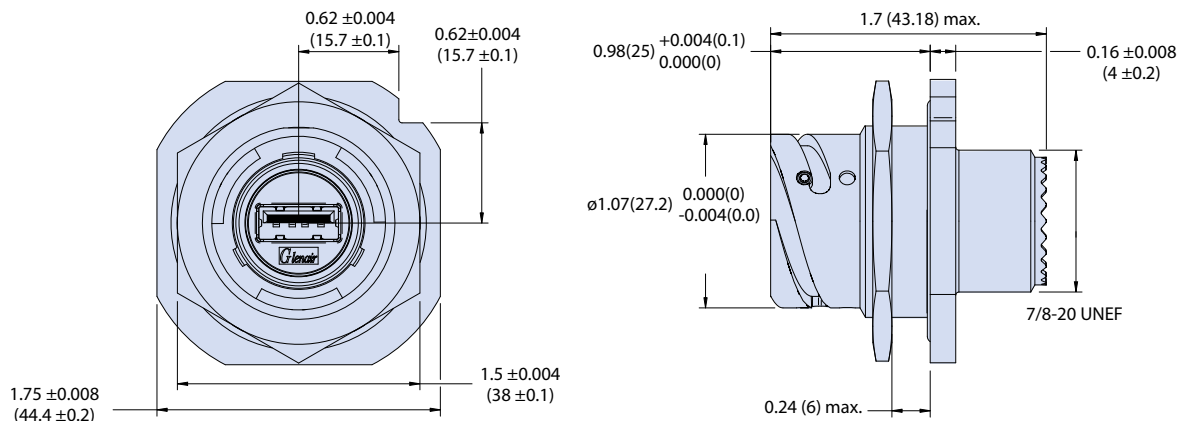


ITS340 Coupler with Accessory Threads and USB
Male-to-Female (Plug) or Female-to-Female (Receptacle)

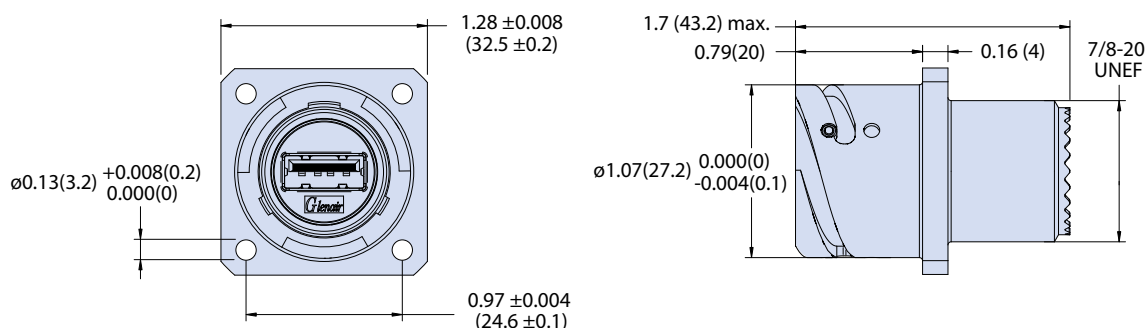
01 - INLINE RECEPTACLE WITH ACCESSORY THREADS



070 - REAR PANEL MOUNT JAM NUT RECEPTACLE WITH ACCESSORY THREADS



030 - REAR PANEL MOUNT SQUARE FLANGE RECEPTACLE WITH ACCESSORY THREADS





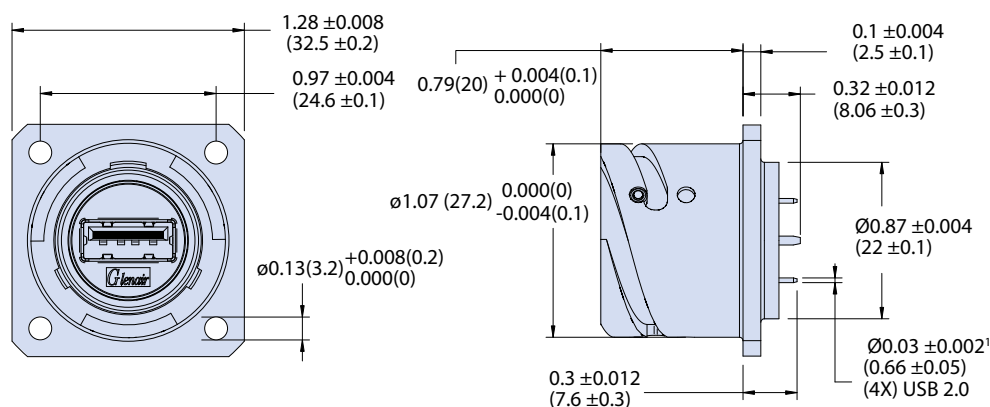
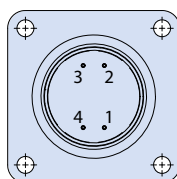
USB 2.0 TYPE A Series ITS (5015 type) Reverse-Bayonet ITS342 Receptacle with USB Female Interface to PC Tail Termination



How to Order							
Sample Part Number	ITS342	03	16	2	A	H	F6
Basic Number	ITS342						
Connector Style¹	03 = Rear Panel Mount Square Flange Receptacle 07 = Rear Panel Mount Jam Nut Receptacle						
Shell Size	16						
USB Performance	2 = 2.0						
USB Interface Type	A = Type A						
USB Orientation	H = Horizontal V = Vertical						
Material/Finish	Omit for Al/Cadmium, Olive Drab (G3) F7 = Al/Conductive Black Zinc Nickel F6 = Al/Black Polymer Electrocoat F11 = Al/Electroless Nickel						

03 - REAR PANEL MOUNT RECEPTACLE

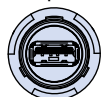
Rear View
Horizontal USB Orientation
Shown USB 2.0



USB Orientation Options

HORIZONTAL

Receptacle

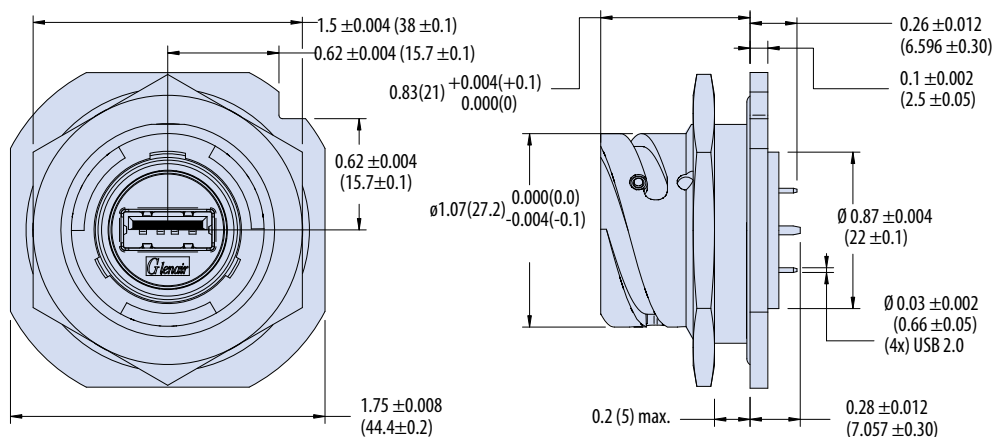


VERTICAL

Receptacle



07 - REAR PANEL MOUNT JAM NUT RECEPTACLE



NOTES

- See Section A for panel cutout dimensions, PCB footprints and complete finish options



USB 2.0 TYPE A

Series ITS (5015 type) Reverse-Bayonet

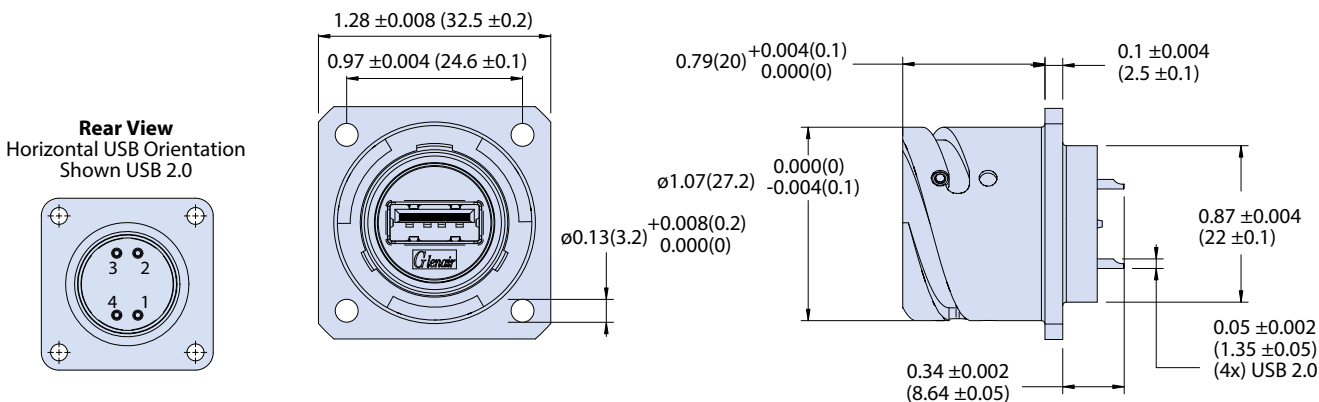
ITS343 Receptacle with USB

Female Interface to Solder Cup Termination



How to Order							
Sample Part Number	ITS343	03	16	2	A	H	F6
Basic Number	ITS343						
Connector Style	03 = Rear Panel Mount Square Flange Receptacle 07 = Rear Panel Mount Jam Nut Receptacle						
Shell Size	16						
USB Performance	2 = 2.0						
USB Interface Type	A = Type A						
USB Orientation	H = Horizontal V = Vertical						
Material/Finish	Omit for Al/Cadmium, Olive Drab (G3) F7 = Al/Conductive Black Zinc Nickel F6 = Al/Black Polymer Electrocoat F11 = Al/Electroless Nickel						

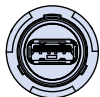
03 - REAR PANEL MOUNT SQUARE FLANGE RECEPTACLE



USB Orientation Options

HORIZONTAL

Receptacle

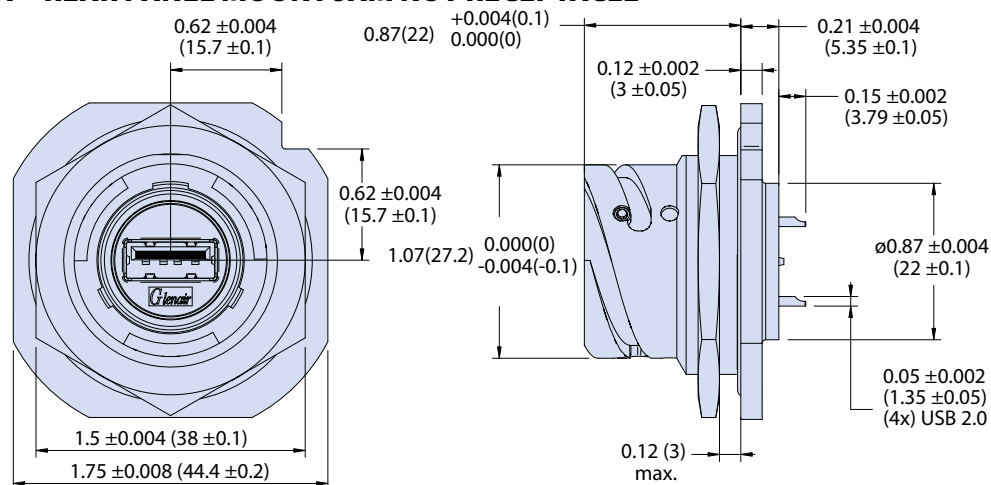


VERTICAL

Receptacle



07 - REAR PANEL MOUNT JAM NUT RECEPTACLE



NOTES

- See Section A for panel cutout dimensions and complete finish options



USB 2.0 TYPE A

Series ITS (5015 type) Reverse-Bayonet

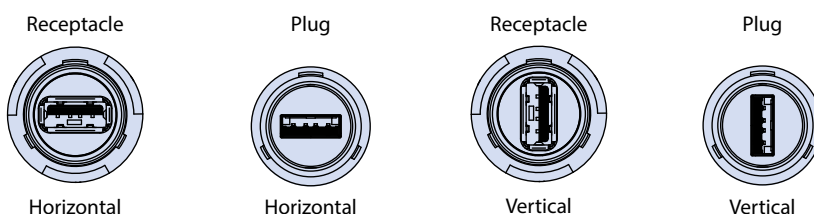


ITS345 Connectors with USB Male (Plug) or Female (Receptacle) to Crimp Removable Contacts



How to Order							
Sample Part Number	ITS345	06	16	2	A	H	F6
Basic Number	ITS345						
Connector Style ¹	06 = Plug with Accessory Threads 01 = InLine Receptacle w/ Accessory Thd 070 = Rear Panel Mount Jam Nut Receptacle with Accessory Thread 030 = Rear Panel Mount Square Flange Receptacle with Accessory Threads						
Shell Size	16						
USB Performance	2 = 2.0						
USB Interface Type	A = Type A						
USB Orientation	H = Horizontal V = Vertical						
Material/Finish	Omit for Al/Cadmium, Olive Drab (G3) F6 = Al/Black Polymer Electrocoat F7 = Al/Conductive Black Zinc Nickel F11 = Al/Electroless Nickel						

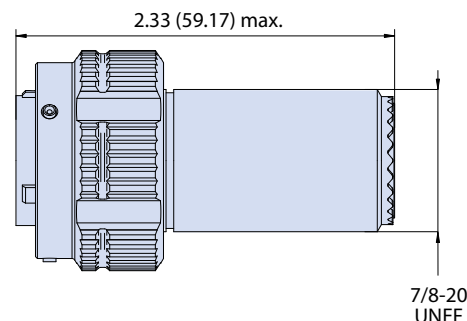
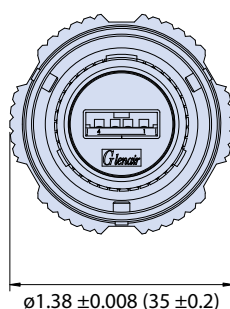
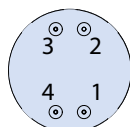
USB Orientation Options



06 - PLUG WITH ACCESSORY THREADS

Rear View

Horizontal USB Orientation
Shown USB 2.0 Type A Male



NOTES

- See Section A for panel cutout dimensions



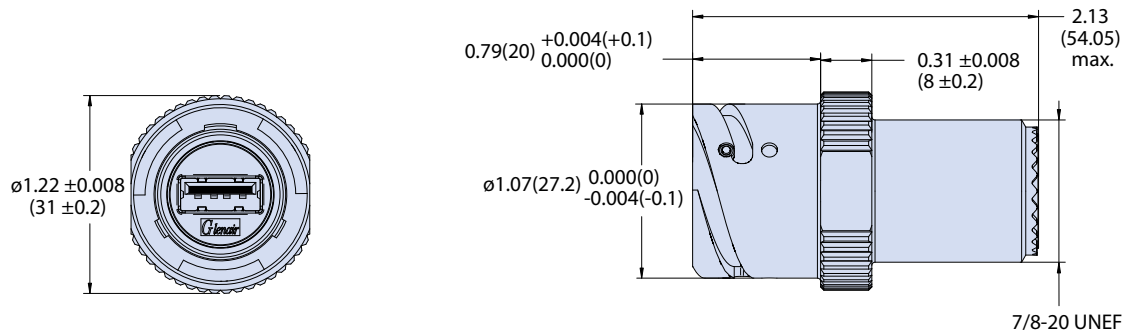
USB 2.0 TYPE A

Series ITS (5015 type) Reverse-Bayonet

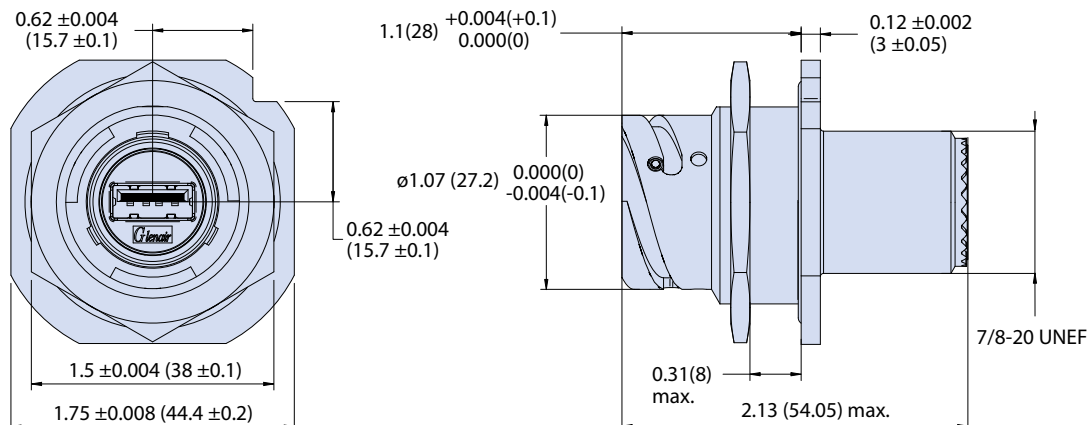


ITS345 Connectors with USB Male (Plug) or Female (Receptacle) to Crimp Removable Contacts

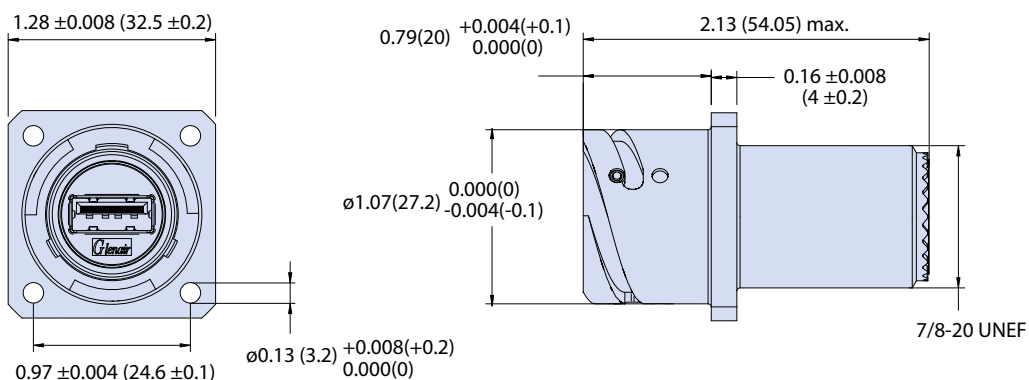
01 - INLINE RECEPTACLE WITH ACCESSORY THREADS



070 - REAR PANEL MOUNT JAM NUT RECEPTACLE WITH ACCESSORY THREADS



030 - REAR PANEL MOUNT RECEPTACLE WITH ACCESSORY THREADS





USB 2.0 TYPE A

Series ITS (5015 type) Reverse-Bayonet

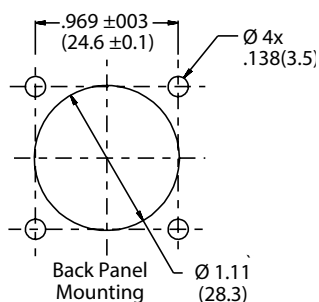


ITS370 Feedthrough Receptacle with USB Female-to-Female Interface

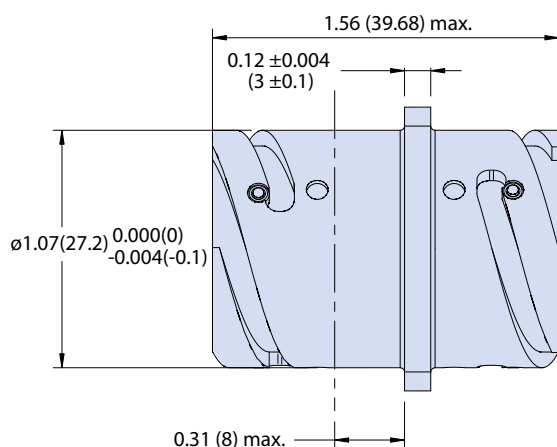


How to Order								
Sample Part Number	ITS370	03PP	16	2	A	A	H	F6
Basic Number	ITS370							
Connector Style ¹	03PP = Rear panel mount receptacle bulkhead feed through							
Shell Size	16							
USB Performance	2 = 2.0							
USB Front Interface Type	A = Type A							
USB Rear Interface Type	A = Type A							
USB Orientation	H = Horizontal V = Vertical							
Material/Finish	Omit for Al/Cadmium, Olive Drab (G3) F6 = Black Polymer Electrocoat F7 = Conductive Black Zinc Nickel F11 = Electroless Nickel							

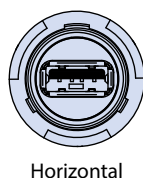
Recommended Panel Cutout



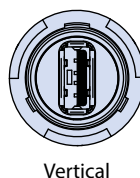
Square Flange Mount
Recommended Mounting Holes
Panel Thickness .315 (8) Max



USB RECEPTACLE ORIENTATION OPTIONS



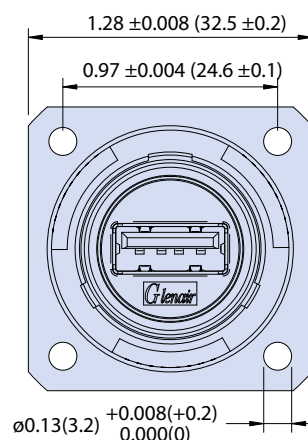
Horizontal



Vertical

NOTES

1. See Section A for panel cutout dimensions



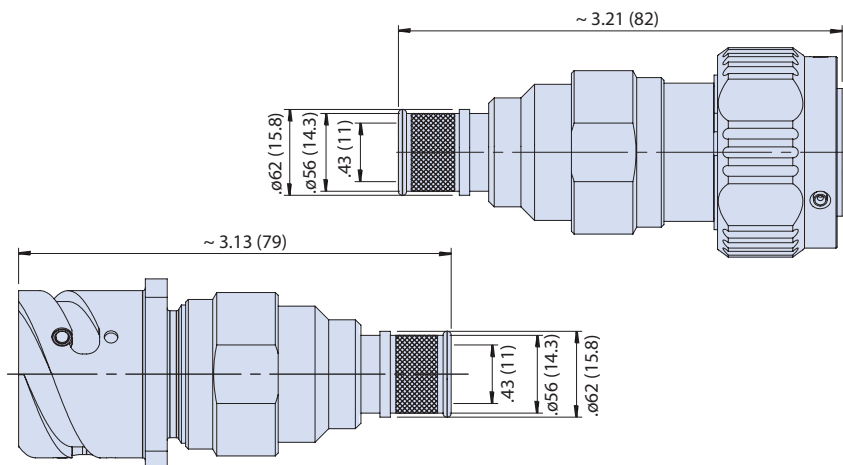


USB 2.0 TYPE A Series ITS (5015 type) Reverse-Bayonet ITS340H Connector and Backshell with Banding Porch and Shrink Boot Groove



How to Order										
Sample Part Number		ITS340H	030	16	2	A	A	H	ZL	F6
Basic Number	ITS340H									
Connector Style ¹	06 = Plug with Accessory Thread 01 = InLine Receptacle with Accessory Thread 070 = Rear Panel Mount Jam Nut Receptacle with Accessory Thread 030 = Rear Panel Mount Square Flange Receptacle with Accessory Thread									
Shell Size	16									
USB Performance	2 = 2.0									
USB Front Interface Type	A = Type A									
USB Rear Interface Type	A = Type A									
USB Orientation	H = Horizontal V = Vertical									
Backshell	ZL = With banding platform for direct attachment of cable shield and shrink boot									
Material/Finish	Omit for Aluminum/Cadmium, Olive Drab (G3) F7 = Aluminum/Conductive Black Zinc Nickel F6 = Aluminum/Black Polymer Electrocoat F11 = Aluminum/Electroless Nickel									

Plug and Receptacle without Pigtail



HEAT SHRINK BOOT

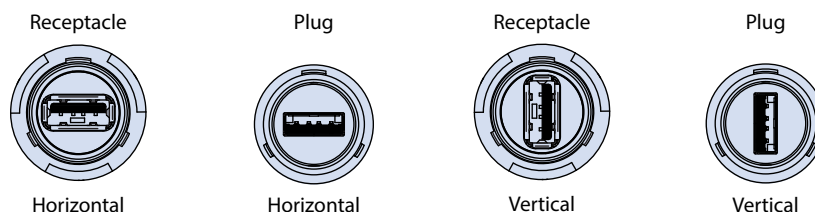


Glenair P/N : **770-004S903W2**

Must be ordered separately

Type 9 flexible polyolefin short profile boots have an operating temperature range of -40°C to 100°C and provide very good resistance to fuels, oils and solvents. These boots fit most standard boot adapters for circular connectors and are specifically designed for low temperature rated CAT5e and USB cables.

USB Orientation Options



NOTES

- See Section A for panel cutout dimensions and complete finish options



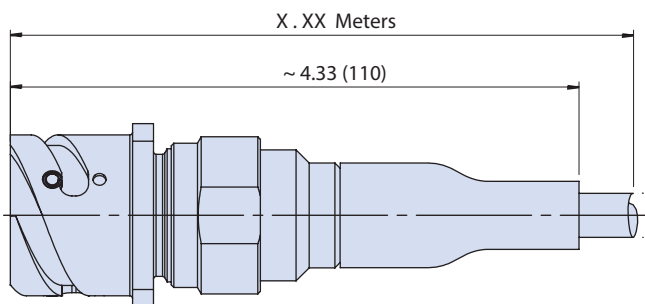
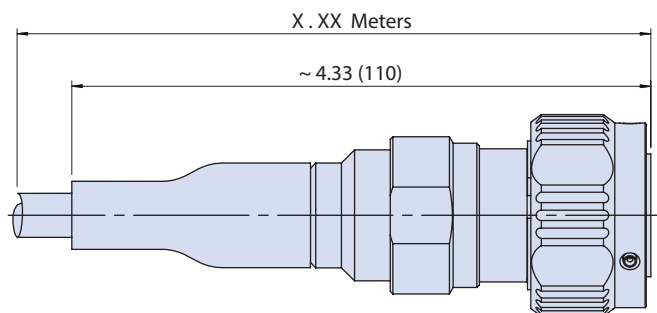
USB 2.0 TYPE A

Series ITS (5015 type) Reverse-Bayonet



ITS340H Connector and Backshell with Pigtail

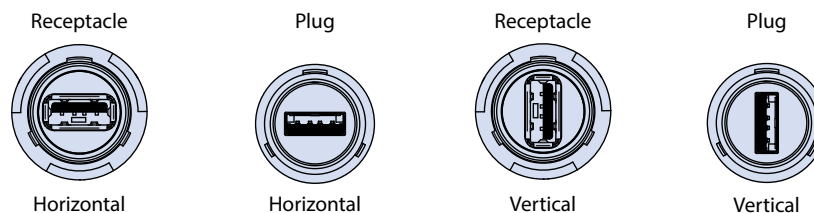
How to Order											
Sample Part Number		ITS340H	030	16	2	A	A	H	ZL	0.5	F6
Basic Number	ITS340H										
Connector Style ¹	030 = Rear Panel Mount Square Flange Receptacle with Accessory Threads 01 = InLine Receptacle with Accessory Threads 070 = Rear Panel Mount Jam Nut Receptacle with Accessory Threads 06 = Straight Plug Connector with Accessory Threads										
Shell Size	16										
USB Performance	2 = 2.0										
USB Front Interface Type	A = Type A										
USB Rear Interface Type	A = Type A										
USB Orientation	H = Horizontal V = Vertical										
Backshell	ZL = Backshell with banding platform for direct attachment of cable shield and shrink boot pre-installed										
Cable Length	0.5 = 0.5 meter pigtail (20 inches)*; See High Data Rate Cable P/N 963-012										
Material/Finish	Omit for Aluminum/Cadmium, Olive Drab (G3) F6 = Aluminum/Black Polymer Electrocoat		F7 = Aluminum/Conductive Black Zinc Nickel F11 = Aluminum/Electroless Nickel								



*Cable length to be ordered in 0.5 mt (20 inch) increments

Plug and Receptacle with Pigtail

USB Orientation Options



NOTES

1. See Section A for panel cutout dimensions and complete finish options



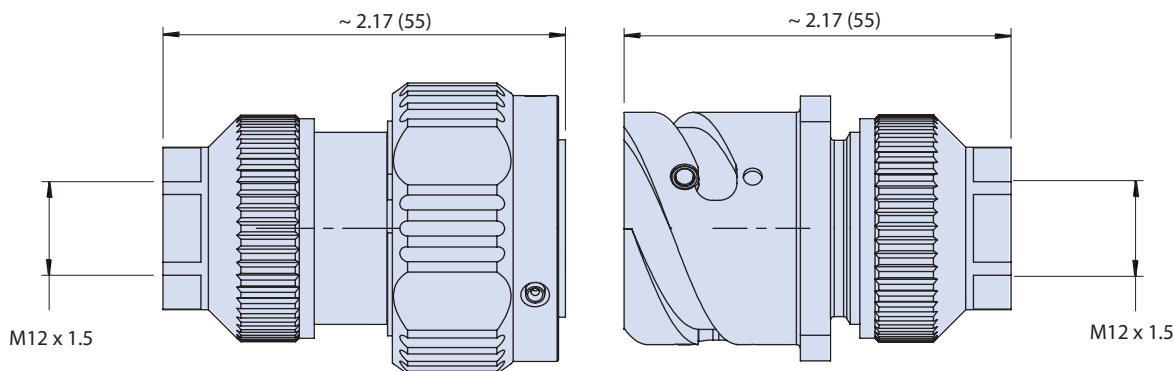
USB 2.0 TYPE A

Series ITS (5015 type) Reverse-Bayonet

ITS340H Connector with Internal Metric Thread Backshell



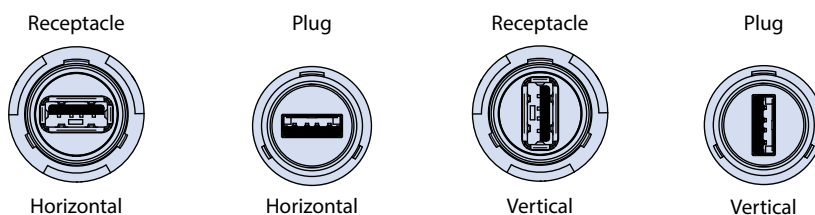
How to Order									
Sample Part Number	ITS340H	030	16	2	A	A	H	M	F6
Basic Number	ITS340H								
Connector Style ¹	030 = Rear Panel Mount Square Flange Receptacle with Accessory Threads 01 = InLine Receptacle with Accessory Threads 070 = Rear Panel Mount Jam Nut Receptacle with Accessory Threads 06 = Straight Plug Connector with Accessory Threads								
Shell Size	16								
USB Performance	2 = 2.0								
USB Front Interface Type	A = Type A								
USB Rear Interface Type	A = Type A								
USB Orientation	H = Horizontal V = Vertical								
Backshell	M = Backshell with metric thread								
Material/Finish	Omit for Aluminum/Cadmium Olive Drab (G3) F6 = Aluminum/Black Polymer Electrocoat F7 = Aluminum/Conductive Black Zinc Nickel F11 = Aluminum/Electroless Nickel								



Plug and Receptacle without Cable Gland

(Other Backshells option are available, please consult the factory)

USB Orientation Options



NOTES

- See Section A for panel cutout dimensions and complete finish options



USB 2.0 TYPE A

Series ITS (5015 type) Reverse-Bayonet

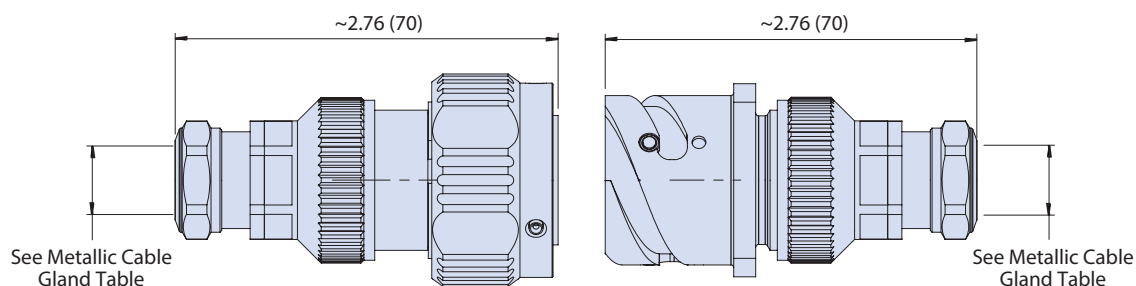


ITS340H Connector and Backshell with Metallic Cable Gland, with or without Pigtails

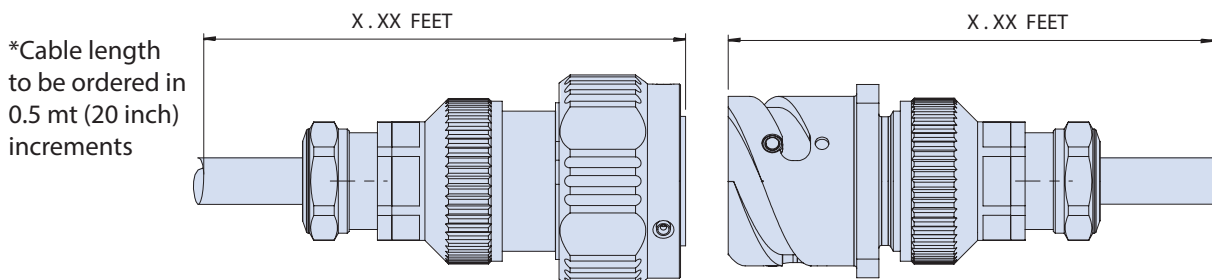
How to Order											
Sample Part Number	ITS340H	030	16	2	A	A	H	MS1	0.5	F6	
Basic Number	ITS340H										
Connector Style ¹	030 = Rear Panel Mount Square Flange Receptacle with Accessory Threads 01 = InLine Receptacle with Accessory Threads 070 = Rear Panel Mount Jam Nut Receptacle with Accessory Threads 06 = Straight Plug Connector with Accessory Threads										
Shell Size	16										
USB Performance	2 = 2.0										
USB Front Interface Type	A = Type A										
USB Rear Interface Type	A = Type A										
USB Orientation	H = Horizontal V = Vertical										
Metallic Cable Gland	See Metallic Cable Gland Table										
Cable Length	0.5 = 0.5 mt. (20 inch) pigtail Omit for None										
Material/Finish	Omit for Aluminum/Cadmium, Olive Drab (G3) F7 = Aluminum/Conductive Black Zinc Nickel F6 = Aluminum/Black Polymer Electrocoat F11 = Aluminum/Electroless Nickel										

NOTES

- See Section A for panel cutout dimensions and complete finish options

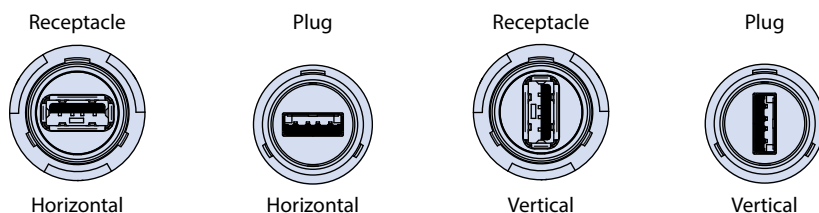


Plug and Receptacle without Pigtail



Plug and Receptacle with Pigtail

USB Orientation Options



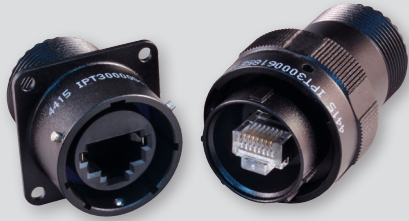
Metallic Cable Gland

Type	Cable Range	Shield
M1	.13 - .19 (3.5 - 5)	No
M2	.25 - .31 (6.5 - 8)	No
MS1	.17 - .23 (4.5 - 6)	Yes
MS2	.23 - .29 (6 - 7.5)	Yes



RJ45 CAT 5E ETHERNET Series IPT (26482 Type) Bayonet Coupler

Product Selection Guide



IPT300

Page F-2

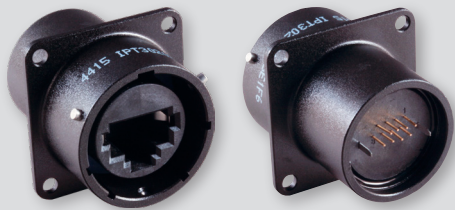
SuperSeal™ Coupler with Accessory Threads and RJ45 Plug-to-Jack (Plug) or Jack-to-Jack (Receptacle).



IPT301

Page F-4

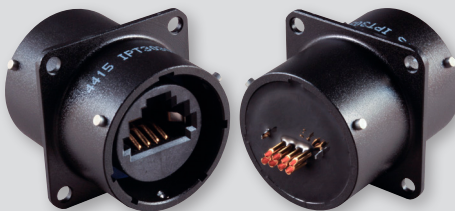
SuperSeal™ Connector with Accessory Threads and RJ45 Plug (Plug) or Jack (Receptacle) to Crimp Removable Contacts.



IPT302

Page F-6

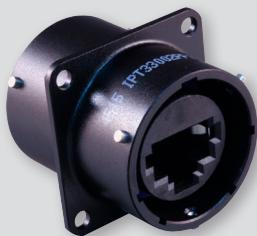
SuperSeal™ Receptacle with Jack to PC Tail Termination.



IPT303

Page F-7

SuperSeal™ Receptacle with Jack to Solder Cup Termination.



IPT330

Page F-8

SuperSeal™ Feedthrough Receptacle with Jack-to-Jack RJ45.



IPT300H

Page F-9

SuperSeal™ Connector and Backshell Options.

F



RJ45 CAT 5E ETHERNET

Series IPT (26482 Type) Bayonet Coupler

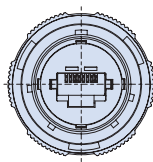


IPT300 Coupler with Accessory Threads and RJ45 Plug-to-Jack (Plug) or Jack-to-Jack (Receptacle)

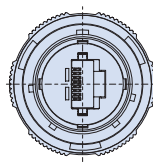


How to Order							
Sample Part Number	IPT300	00	G	18	5E	1	F7
Basic Number	IPT300						
Connector Style ¹	00 = Front Panel Mount Square Flange Receptacle 01 = In-Line Receptacle 070 = Rear Panel Mounting Jam Nut Receptacle 06 = Straight Plug						
Insert-to-Shell Grounding	G = Insert grounded to shell; available for receptacle only (for use with shielded cable) Omit = for none						
Shell Size	18						
RJ45 Category ²	5E = Cat 5E For Cat 6A applications consult factory						
RJ45 Orientation	1, 2, 3 or 4						
Material/Finish	Omit for Aluminum/Cadmium, Olive Drab (G3) F6 = Aluminum/Black Polymer Electrocoat F7 = Aluminum/Conductive Black Zinc Nickel F11 = Aluminum/Electroless Nickel						

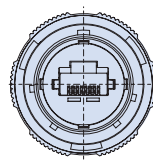
RJ45 Orientation Options



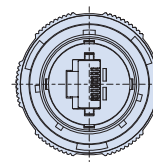
Code 1



Code 2

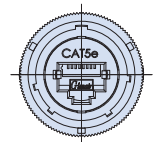


Code 3

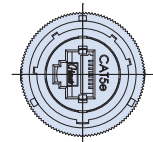


Code 4

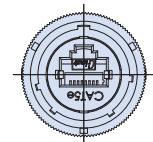
Plug



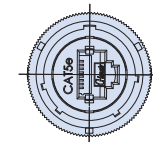
Code 1



Code 2



Code 3



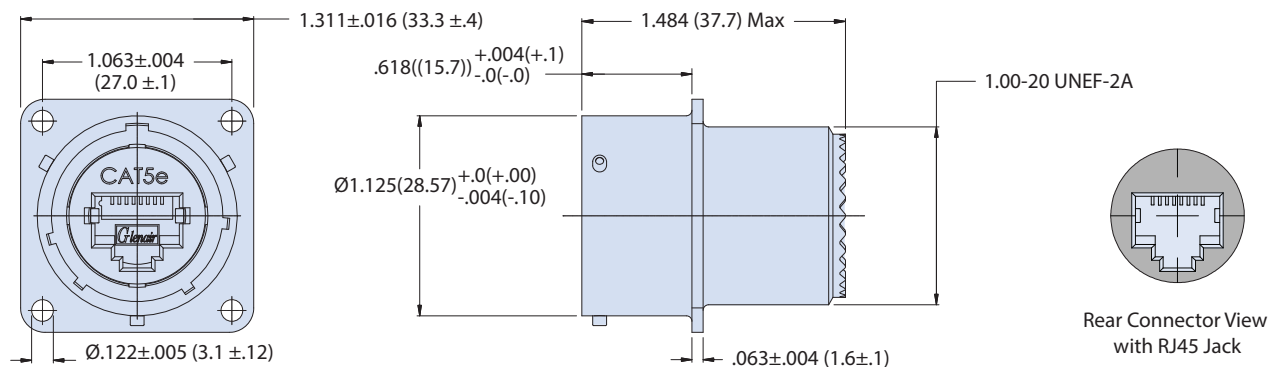
Code 4

Receptacle

NOTES

1. See Section A for recommended panel cut out dimensions
2. Plugs are plug/jack and receptacles are jack/jack

00 - FRONT PANEL MOUNT SQUARE FLANGE RECEPTACLE WITH ACCESSORY THREADS





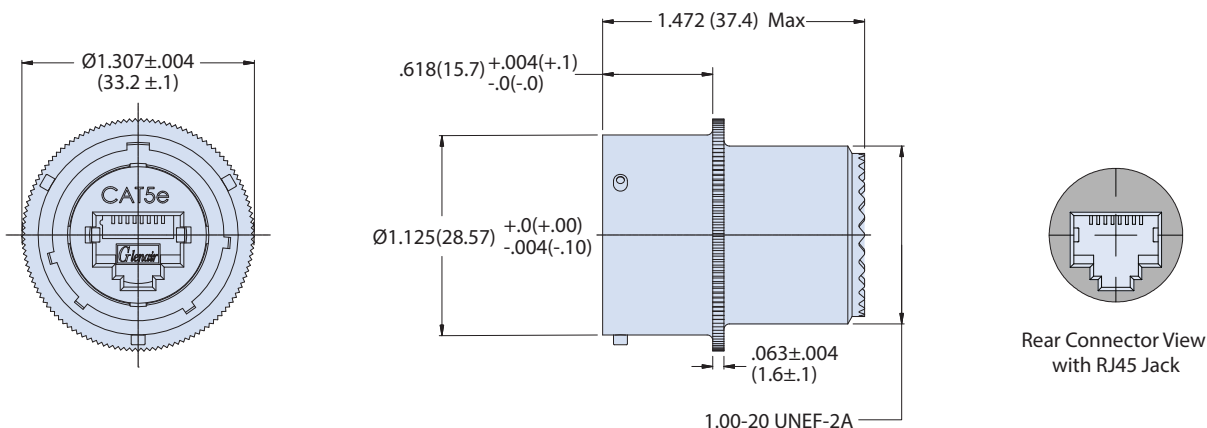
RJ45 CAT 5E ETHERNET

Series IPT (26482 Type) Bayonet Coupler

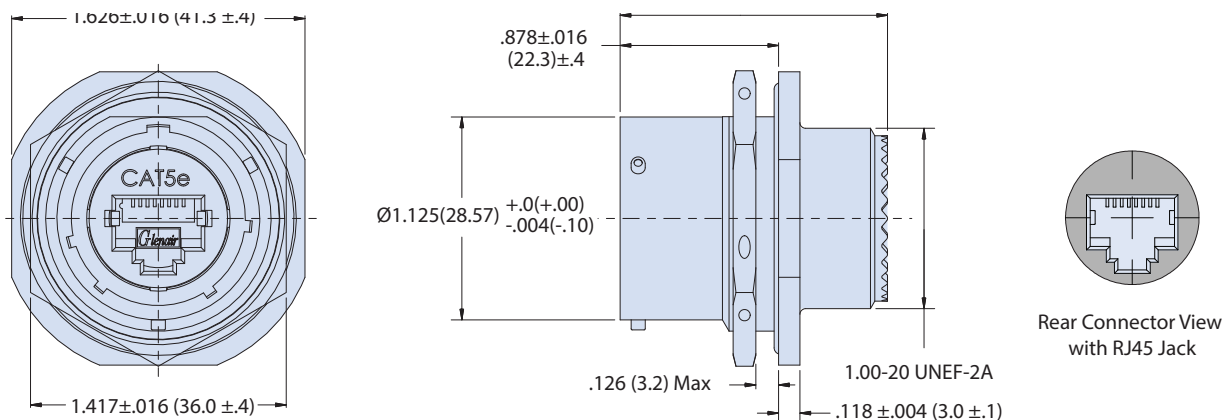


IPT300 Coupler with Accessory Threads and RJ45 Plug-to-Jack (Plug) or Jack-to-Jack (Receptacle)

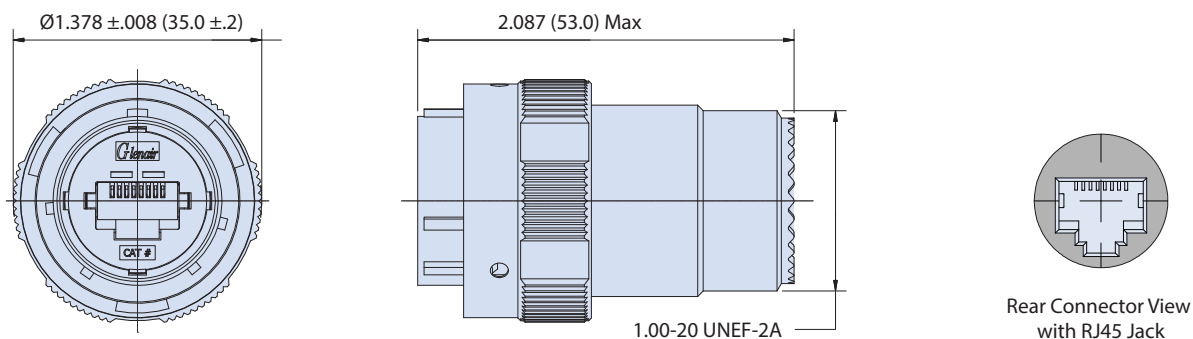
01 - INLINE RECEPTACLE WITH ACCESSORY THREADS



070 - REAR PANEL MOUNT JAM NUT RECEPTACLE WITH ACCESSORY THREADS



06 - PLUG WITH ACCESSORY THREADS





RJ45 CAT 5E ETHERNET

Series IPT (26482 Type) Bayonet Coupler

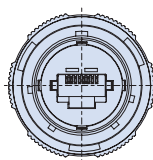


IPT301 Connector with Accessory Threads and RJ45 Plug (Plug) or Jack (Receptacle) to Crimp Removable Contacts

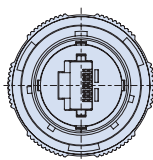


How to Order							
Sample Part Number		IPT301	00	G	18	5E	1 F7
Basic Number	IPT301						
Connector Style	00 = Front Panel Mount Square Flange Receptacle 01 = In-Line Receptacle 070 = Rear Panel Mounting Jam Nut Receptacle 06 = Straight Plug						
Insert-to-Shell Grounding	G = Insert grounded to shell; available for receptacle only (for use with shielded cable) Omit = for none						
Shell Size	18						
RJ45 Category	5E = Cat 5E For Cat 6A applications consult factory						
RJ45 Orientation	1,2,3 or 4						
Material/Finish	Omit for Aluminum/Cadmium, Olive Drab (G3) F6 = Aluminum/Black Polymer Electrocoat F7 = Aluminum/Conductive Black Zinc Nickel F11 = Aluminum/Electroless Nickel						

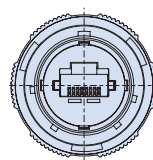
RJ45 Orientation Options



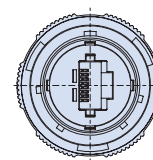
Code 1



Code 2

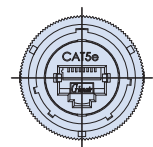


Code 3

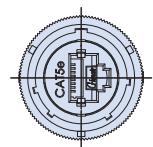


Code 4

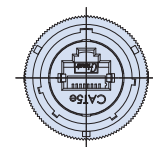
Plug



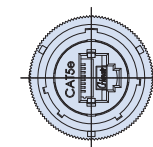
Code 1



Code 2



Code 3



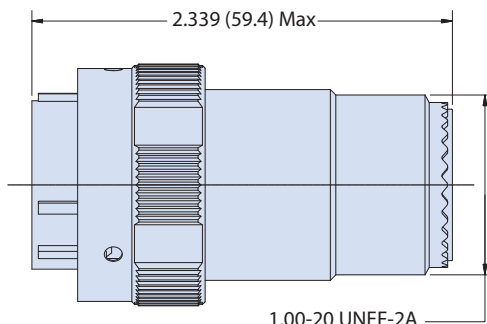
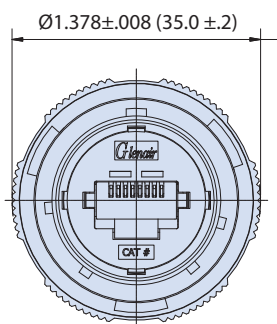
Code 4

Receptacle

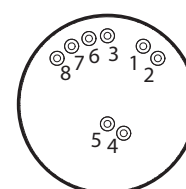
NOTES

- See Section A for recommended panel cut out dimensions

06 - PLUG WITH ACCESSORY THREADS



Crimp Layout (Code 1 Orientation Shown)



F



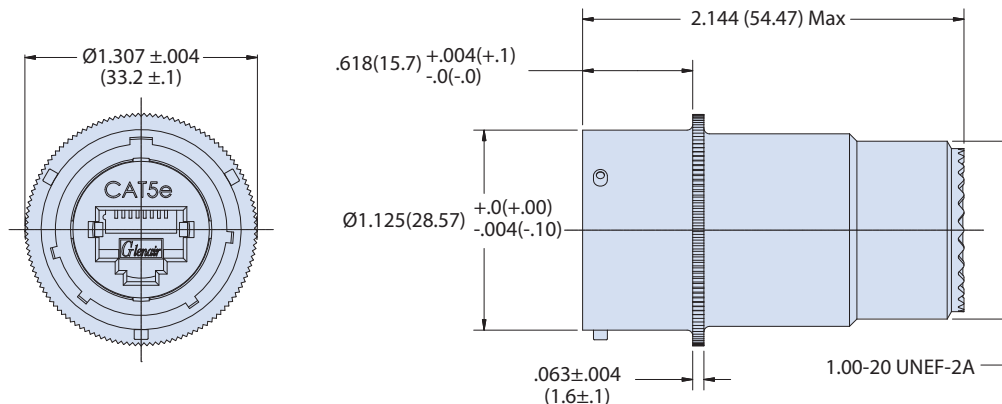
RJ45 CAT 5E ETHERNET

Series IPT (26482 Type) Bayonet Coupler

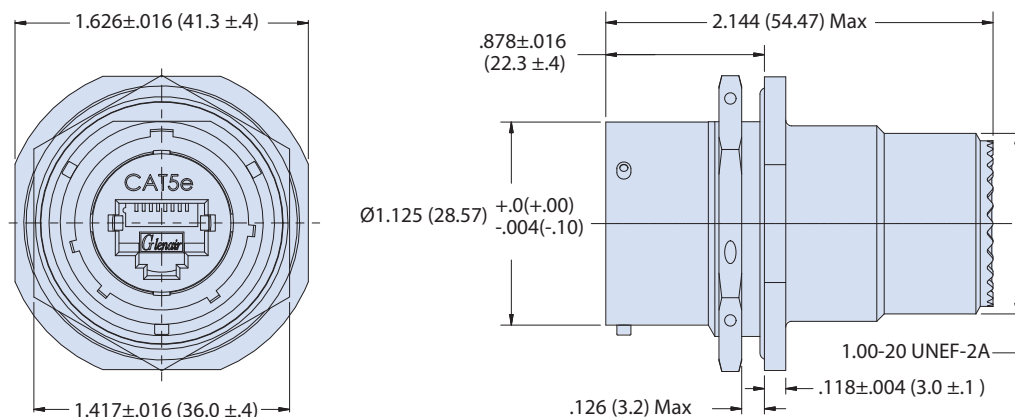


IPT301 Connector with Accessory Threads and RJ45 Plug (Plug) or Jack (Receptacle) to Crimp Removable Contacts

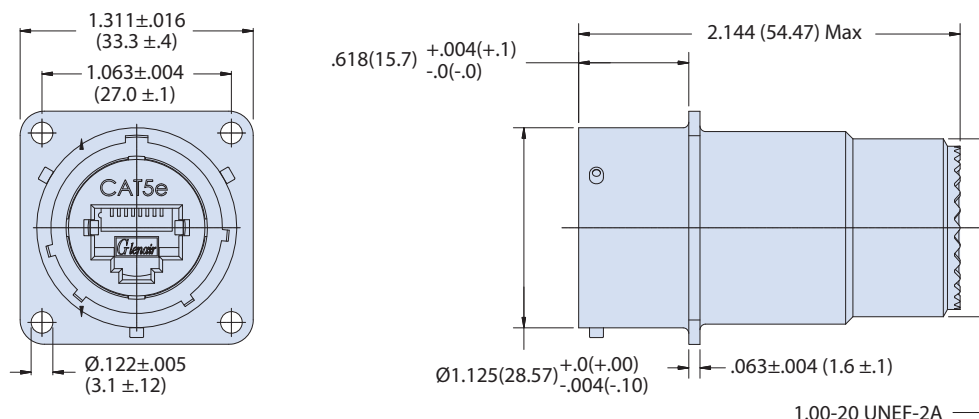
01 - INLINE RECEPTACLE WITH ACCESSORY THREADS

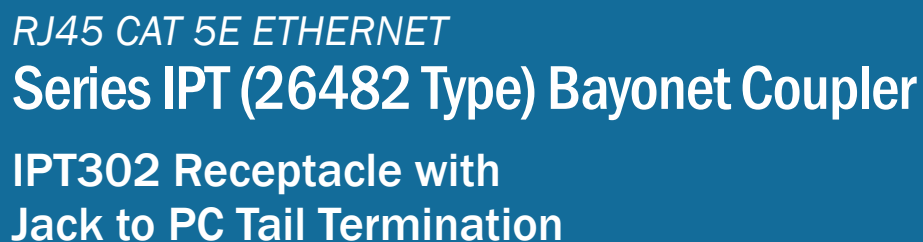


070 - REAR PANEL MOUNTING JAM NUT RECEPTACLE WITH ACCESSORY THREADS



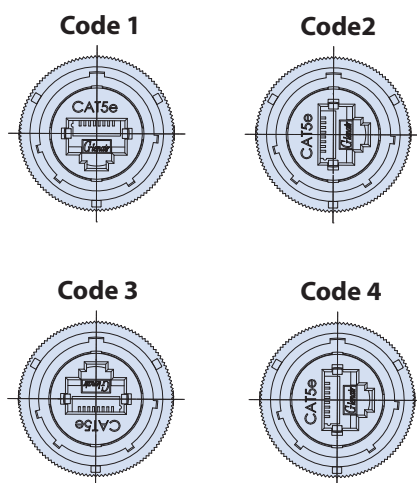
00 - FRONT PANEL MOUNT SQUARE FLANGE RECEPTACLE WITH ACCESSORY THREADS





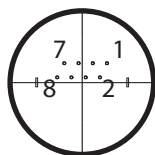
How to Order								
Sample Part Number		IPT302	02	G	18	5E	1	F7
Basic Number	IPT302							
Connector Style ¹	02 = Front panel Mount Square Flange Receptacle 07 = Rear Panel Mount Jam Nut Receptacle							
Insert-to-Shell Grounding	G = Insert grounded to shell (for use with shielded cable) (Use only with G3, F11 or F7 finish)		Omit for none					
Shell Size	18							
RJ45 Category ²	5E = Cat 5E For Cat 6A applications consult factory							
RJ45 Orientation	1,2,3 or 4							
Material/Finish	Omit for Aluminum/Cadmium, Olive Drab (G3) F6 = Aluminum/Black Polymer Electrocoat F7 = Aluminum/Conductive Black Zinc Nickel F11 = Aluminum/Electroless Nickel							

RJ45 Receptacle, Orientation Options



PC tail layout

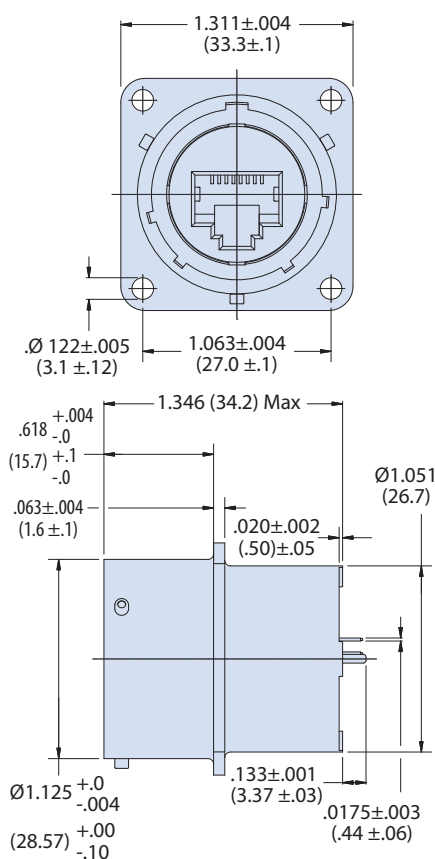
(Code 1 Orientation Shown)



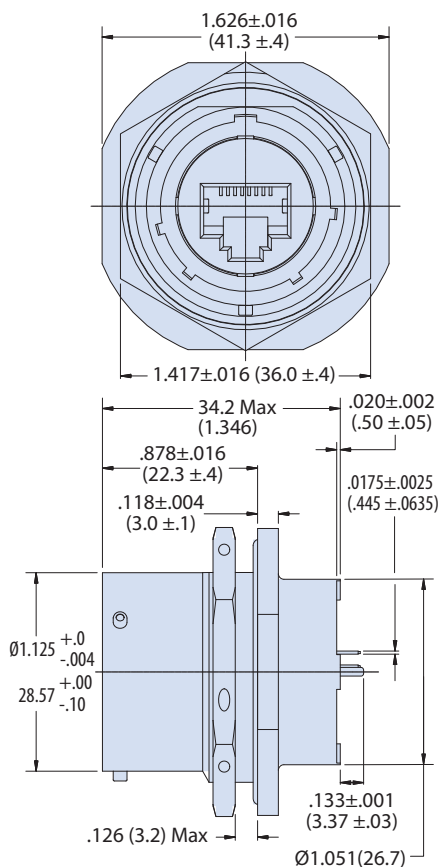
NOTES

1. See Section A for recommended panel cut out dimensions

02 - FRONT PANEL MOUNT SQUARE FLANGE RECEPTACLE



07 - REAR PANEL MOUNTING JAM NUT RECEPTACLE





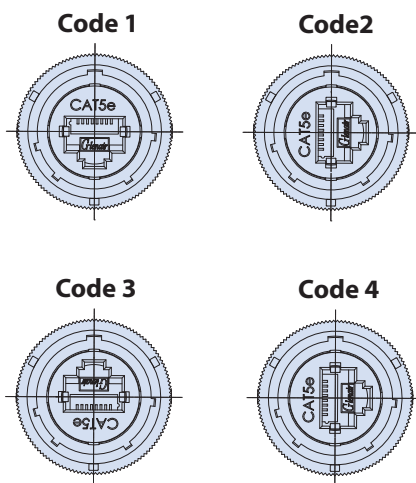
RJ45 CAT 5E ETHERNET Series IPT (26482 Type) Bayonet Coupler

IPT303 Receptacle with Jack to Solder Cup Termination

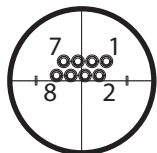


How to Order							
Sample Part Number	IPT303	02	G	18	5E	1	F7
Basic Number	IPT303						
Connector Style ¹	02 = Front Panel Square Flange Mount Receptacle 07 = Rear Panel Mount Jam Nut Receptacle						
Insert-to-Shell Grounding	G = Insert grounded to shell Omit for none (for use with shielded cable) (Use only with G3, F11 or F7 finish)						
Shell Size	18						
RJ45 Category ²	5E = Cat 5E For Cat 6A applications consult factory						
RJ45 Orientation	1,2,3 or 4						
Material/Finish	Omit for Aluminum/Cadmium, Olive Drab (G3) F6 = Aluminum/Black Polymer Electrocoat F7 = Aluminum/Conductive Black Zinc Nickel F11 = Aluminum/Electroless Nickel						

RJ45 Receptacle, Orientation Options



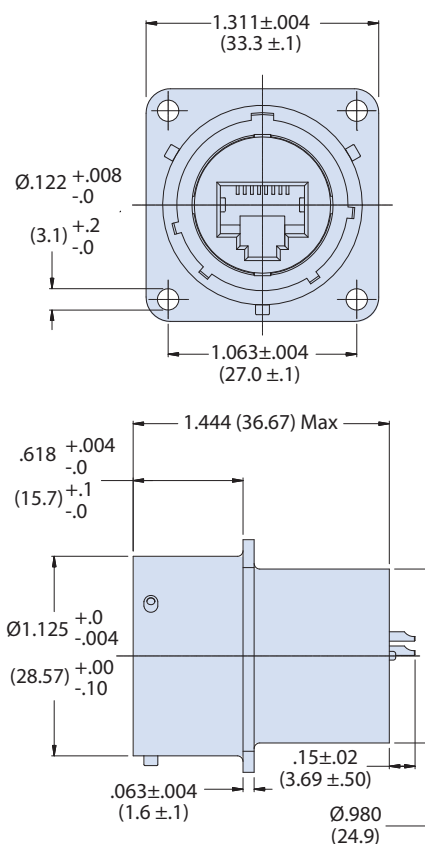
Solder cup layout (Code 1 Orientation Shown)



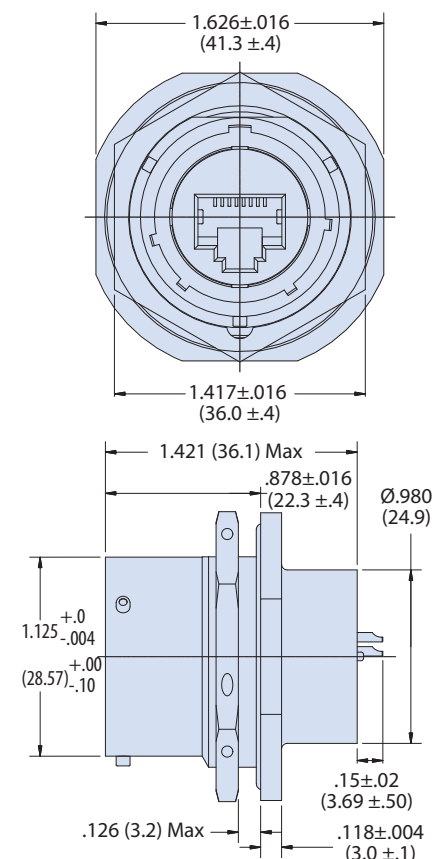
NOTES

- See Section A for recommended panel cut out dimensions and solder cup layout

02 - FRONT PANEL MOUNT SQUARE FLANGE RECEPTACLE



07 - REAR PANEL MOUNTING JAM NUT RECEPTACLE





RJ45 CAT 5E ETHERNET

Series IPT (26482 Type) Bayonet Coupler



IPT330 Feedthrough Receptacle with Jack-to-Jack RJ45

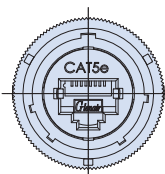


How to Order						
Sample Part Number	IPT330	02PP	18	5E	1	F7
Basic Number	IPT330					
Connector Style¹	02PP = Front Panel Mount Square Flange receptacle					
Shell Size	18					
RJ45 Category²	5E = Cat 5E For Cat 6A applications consult factory					
RJ45 Orientation	1,2,3 or 4					
Material/Finish	Omit for Aluminum/Cadmium, Olive Drab (G3) F6 = Aluminum/Black Polymer Electrocoat F7 = Aluminum/Conductive Black Zinc Nickel F11 = Aluminum/Electroless Nickel					

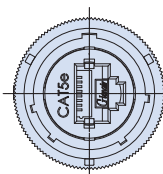
NOTES

1. See Section A for recommended panel cut out dimensions
2. Feedthrough is jack/jack layout

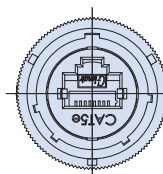
RJ45 Orientation, Receptacle Options



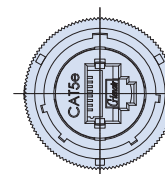
Code 1



Code2

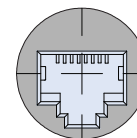
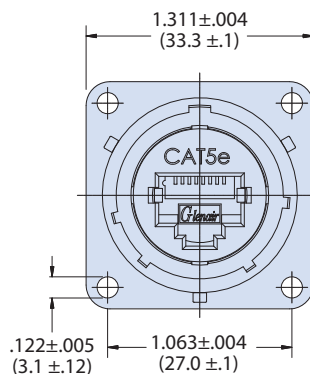
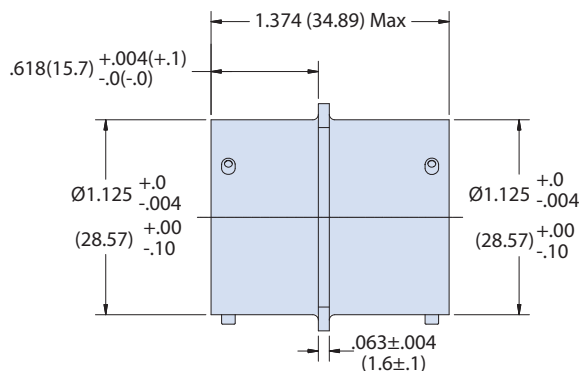


Code 3



Code 4

02 - FRONT PANEL SQUARE FLANGE MOUNT RECEPTACLE



Rear Connector View
with RJ45 Jack

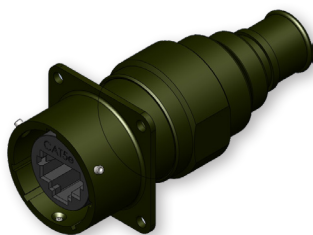


RJ45 CAT 5E ETHERNET Series IPT (26482 Type) Bayonet Coupler

IPT300H Connector and Backshell with Banding Porch and Boot Groove



Sample Part Number		How to Order							
		IPT300H	00	G	18	5E	1	ZL	F7
Basic Number	IPT300H								
Connector Style ¹	00 = Front Panel Mount Square Flange Receptacle 01 = In-Line Receptacle 070 = Rear Panel Mount Jam Nut Receptacle 06 = Straight Plug								
Insert-to-Shell Grounding	G = Insert grounded to shell; available for receptacle only and for use with shielded cable Omit = for none								
Shell Size	18								
RJ45 Category	5E = Cat 5E (For Cat 6A applications consult factory)								
RJ45 Orientation	1,2,3 or 4								
Backshell	ZL = Backshell with Banding Porch and Boot Groove								
Material/Finish	Omit for Aluminum/Cadmium, Olive Drab (G3) F6 = Aluminum/Black Polymer Electrocoat F7 = Aluminum/Conductive Black Zinc Nickel F11 = Aluminum/Electroless Nickel								



HEAT SHRINK BOOT

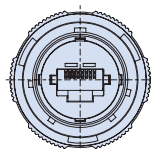


Glenair P/N : 770-004S903W2

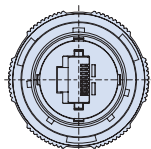
Must be ordered separately

Type 9 flexible polyolefin short profile boots have an operating temperature range of -40°C to 100°C and provide very good resistance to fuels, oils and solvents. These boots fit most standard boot adapters for circular connectors and are specifically designed for low temperature rated CAT5e and USB cables.

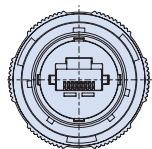
RJ45 Orientation Options



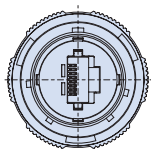
Code 1



Code 2

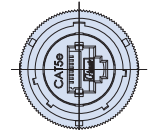
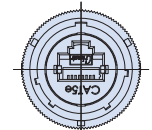
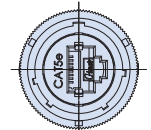
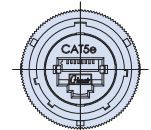


Code 3



Code 4

Plug

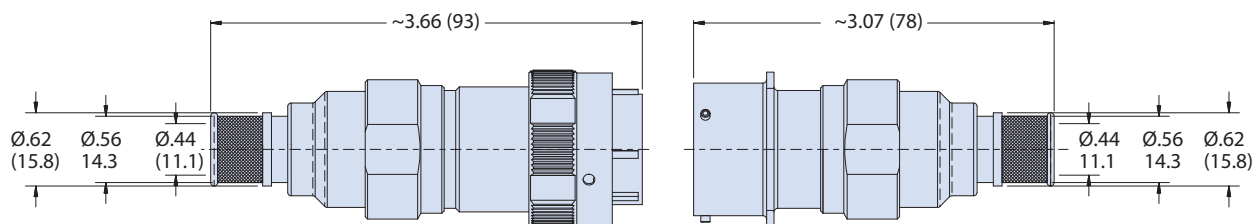


Receptacle

NOTES

- See Section A for recommended panel cut out dimensions

CONNECTOR AND BACKSHELL WITH INTEGRAL BANDING PORCH AND BOOT GROOVE





RJ45 CAT 5E ETHERNET

Series IPT (26482 Type) Bayonet Coupler

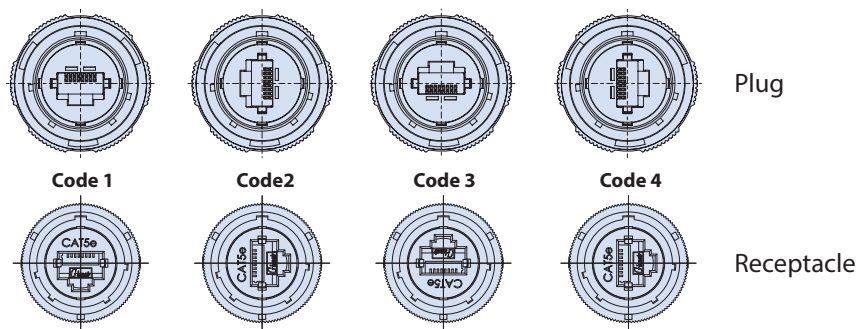


IPT300H Connector and Backshell with Cable Shield
Terminated Pigtail and Fitted Shrink Boot

How to Order											
Sample Part Number			IPT300H	00	G	18	5E	1	T	ZL	1 F7
Basic Number	IPT300H										
Connector Style ¹	00 = Front Panel Mount Square Flange Receptacle with Accessory Threads 01 = In-Line Receptacle 070 = Rear Panel Mount Jam Nut Receptacle with Accessory Threads 06 = Straight Plug										
Insert-to-Shell Grounding	G = Insert grounded to shell; available for receptacle only and for use with shielded cable Omit = for none										
Shell Size	18										
RJ45 Category	5E = Cat 5E For Cat 6A applications consult factory										
RJ45 Orientation	1,2,3 or 4										
Shrink Boot	T = Shrink Boot Omit for none										
Backshell	ZL = Backshell with Banding Porch and Boot Groove										
Cable Length	.5 meter; order in .5 meter increments (approximately 20 inches)										
Material/Finish	Omit for Aluminum/Cadmium, Olive Drab (G3) F7 = Aluminum/Conductive Black Zinc Nickel F6 = Aluminum/Black Polymer Electrocoat F11 = Aluminum/Electroless Nickel										



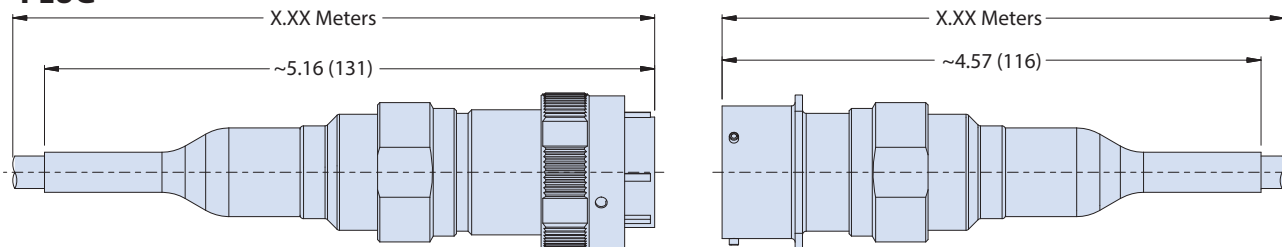
RJ45 Orientation Options



NOTES

1. See Section A recommended panel cut out dimensions

06 - PLUG



Cable to be ordered in 0.5 meter increments



RJ45 CAT 5E ETHERNET Series IPT (26482 Type) Bayonet Coupler

IPT300H Connector and Backshell with Internal Metric Thread or PG9 Thread

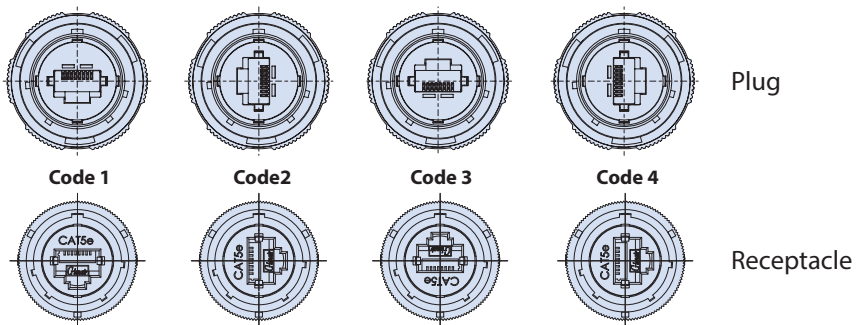


Sample Part Number		How to Order							
IPT300H		00	G	18	5E	1	M	F7	
Basic Number	IPT300H								
Connector Style ¹	00 = Front Panel Mount Square Flange Receptacle with Accessory Threads 01 = In-Line Receptacle 070 = Rear Panel Mount Jam Nut Receptacle with Accessory Threads 06 = Straight Plug								
Insert-to-Shell Grounding	G = Insert grounded to shell; available for receptacle only and for use with shielded cable Omit = for none								
Shell Size	18								
RJ45 Category	5E = Cat 5E For Cat 6A applications consult factory								
RJ45 Orientation	1,2,3 or 4								
Backshell	M = M16 x 1.5 Internal Thread PG9 = PG9 Internal Thread								
Material/Finish	Omit for Aluminum/Cadmium, Olive Drab (G3) F6 = Aluminum/Black Polymer Electrocoat F7 = Aluminum/Conductive Black Zinc Nickel F11 = Aluminum/Electroless Nickel								

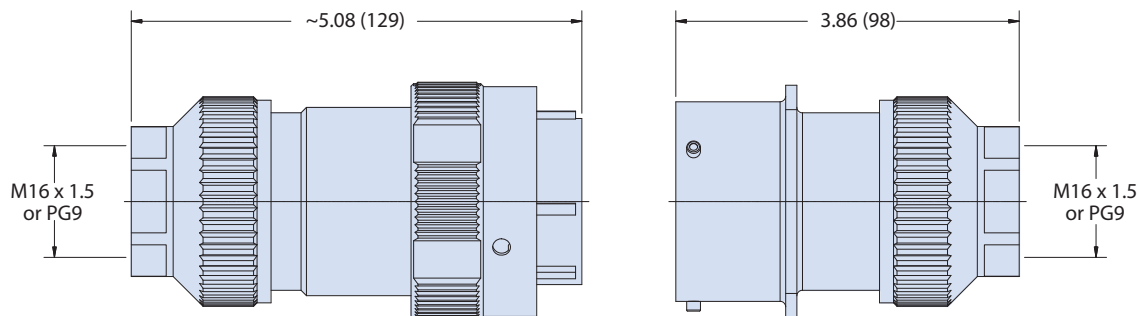
NOTES

- See Section A for recommended panel cut out dimensions

RJ45 Orientation Options



CONNECTOR AND BACKSHELL WITH M16 X 1.5 OR PG9 INTERNAL THREAD





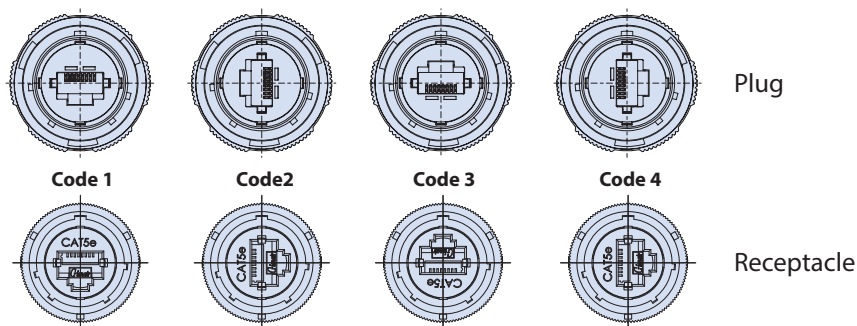
RJ45 CAT 5E ETHERNET Series IPT (26482 Type) Bayonet Coupler

IPT300H Connector and Backshell with Cable Gland and Optional Pigtail



How to Order									
Sample Part Number	IPT300H	00	G	18	5E	1	M	0.5	F7
Basic Number	IPT300H								
Connector Style ¹	00 = Front Panel Mount Square Flange Receptacle with Accessory Threads 01 = In-Line Receptacle 070 = Rear Panel Mounting Jam Nut Receptacle 06 = Straight Plug								
Insert-to-Shell Grounding	G = Insert grounded to shell; available for receptacle only; for use with shielded cable Omit = for none								
Shell Size	18								
RJ45 Category	5E = Cat 5E For Cat 6A applications consult factory								
RJ45 Orientation	1, 2, 3 or 4								
Metallic Cable Gland	M1, M2, MS1, MS2 (see metallic cable gland table)								
Cable Length	0.5 = 0.5 meter increments; I.E. 1.5 = 1.5 meters								
Material/Finish	Omit for Aluminum/Cadmium, Olive Drab (G3) F6 = Aluminum/Black Polymer Electrocoat F7 = Aluminum/Conductive Black Zinc Nickel F11 = Aluminum/Electroless Nickel								

RJ45 Orientation Options



Metallic Cable Gland		
Type	Cable Range	Shield
M1	.236 - .315 (6 - 8 mm)	No
M2	.315 - .394 (8 - 10)	No
MS1	.236 - .315 (6 - 8 mm)	Yes
MS2	.315 - .394 (8 - 10)	Yes

NOTES

1. See Section A for recommended panel cut out dimensions



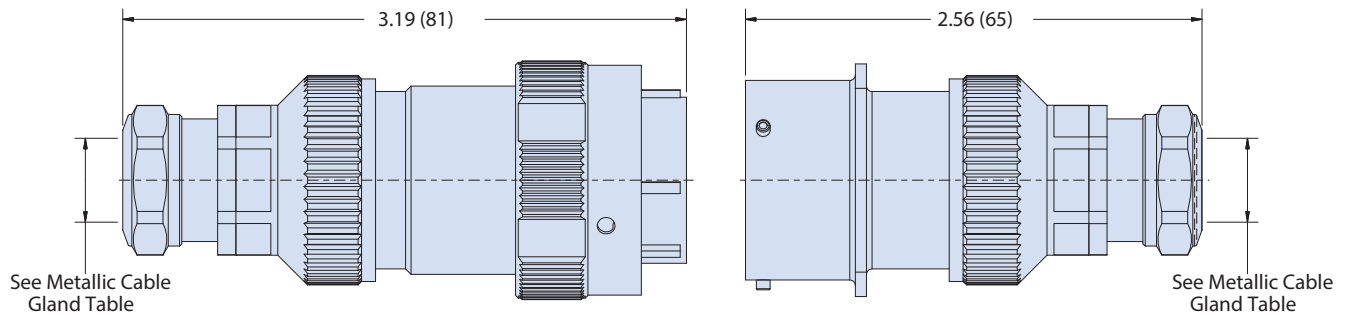
RJ45 CAT 5E ETHERNET

Series IPT (26482 Type) Bayonet Coupler

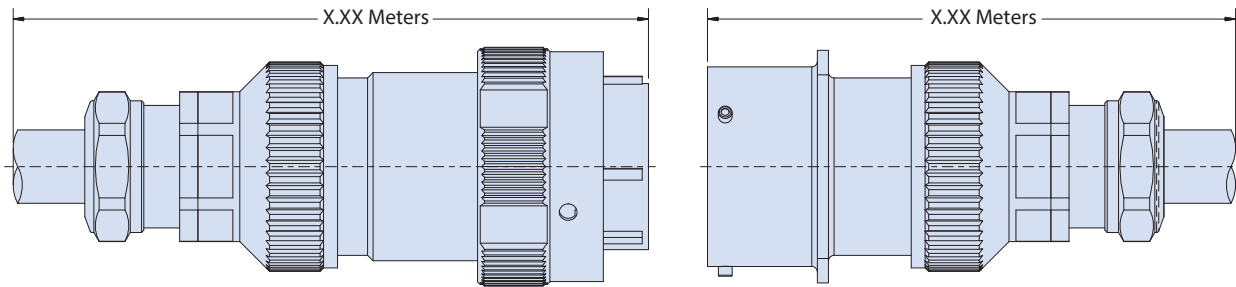


IPT300H Connector and Backshell with
Cable Gland and Optional Pigtail

PLUG AND RECEPTACLE WITHOUT PIGTAIL



PLUG AND RECEPTACLE WITH PIGTAIL



Cable to be ordered in 0.5 meter increments

**SERIES IPT
FIELD-READY
USB 2.0**

SUPERSEAL™

Rugged environmental Series IPT bayonet connectors with IP67 sealing, robust shielding, and a complete range of wire, cable, and circuit board terminations.



Series IPT SuperSeal™ Advantages

- 26482 Type bayonet connectors for mil-aero applications
- Superior sealing—IP67 open face and IP68 mated — for complete system protection against water, sand and dust
- Highly durable USB design, including enhanced operating temperature, increased life-cycle, and rugged vibration and shock performance
- Crimp, solder-cup, PC-tail, and wire termination options
- USB 2.0 plug and receptacle versions
- Available backshells provide strain-relief and environmental protection



Glenair, Inc.
1211 Air Way
Glendale, CA 91201-2497
818-247-6000
sales@glenair.com
www.glenair.com



USB 2.0 TYPE A Series IPT (26482 Type) Bayonet Coupler

Product Selection Guide



G



IPT340

Page G-2

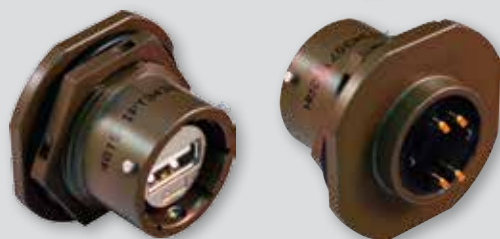
SuperSeal™ Coupler with Accessory Threads and USB Male-to-Female (Plug) or Female-to-Female (Receptacle) Interface.



IPT342

Page G-4

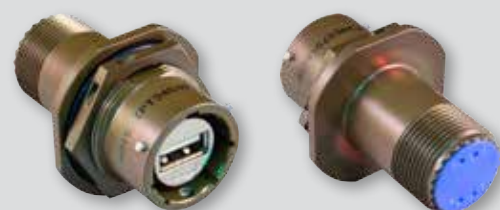
SuperSeal™ Receptacle with USB Female Interface to PC Tail Termination.



IPT343

Page G-6

SuperSeal™ Receptacle with USB Female Interface to Solder Cup Termination.



IPT345

Page G-8

SuperSeal™ Connectors with Accessory Threads and USB Male (Plug) or Female (Receptacle) Interface to Crimp Removable Contacts.



IPT370

Page G-10

SuperSeal™ Feedthrough Receptacle with USB Female-to-Female Interface.



IPT340H

Page G-11

SuperSeal™ USB Connector and Backshell with Accessory Options.



USB 2.0 TYPE A

Series IPT (26482 Type) Bayonet Coupler



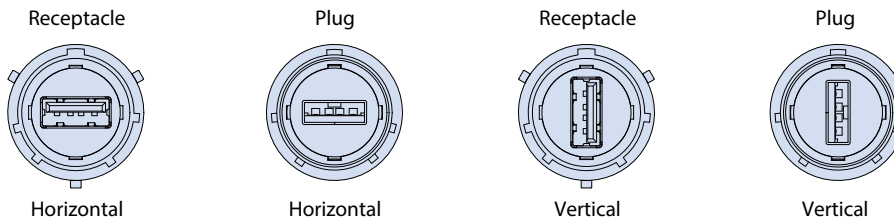
IPT340 Coupler with Accessory Threads and USB
Male-to-Female (Plug) or Female-to-Female (Receptacle)

G

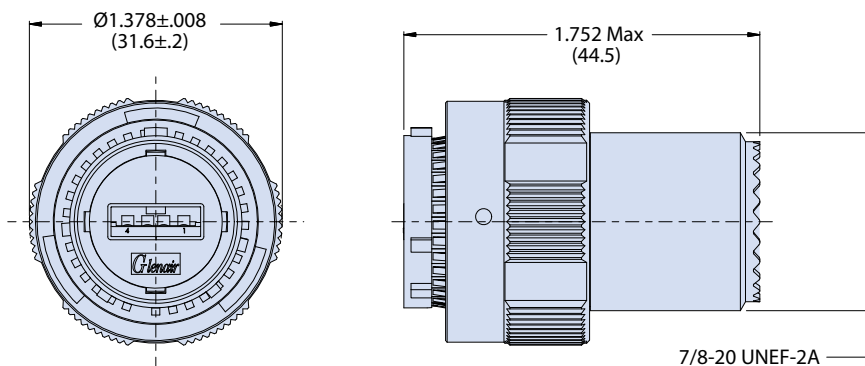


How to Order							
Sample Part Number	IPT340	00	16	2	A	H	F6
Basic Number	IPT340						
Connector Style ¹	06 = Plug 01 = In-Line Receptacle 070 = Rear Panel Mount Jam Nut Receptacle 00 = Wall Mount Receptacle						
Shell Size	16						
USB Performance	2 = 2.0						
USB Type	A = Type A						
Orientation Option	H = Horizontal V = Vertical						
Material/Finish	Omit for Aluminum/Cadmium, Olive Drab F6 = Black Polymer Electrocoat F7 = Conductive Black Zinc Nickel F11 = Electroless Nickel						

USB Orientation Options



06 - PLUG WITH ACCESSORY THREADS



NOTES

1. See Section A panel cutout dimensions



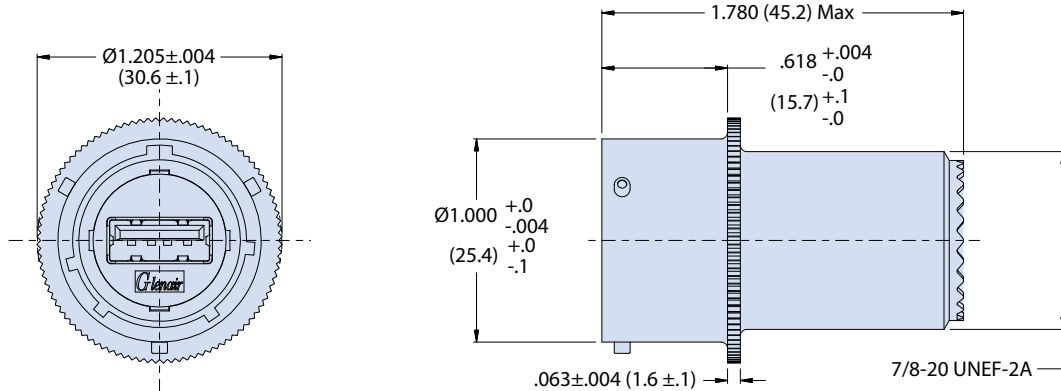
USB 2.0 TYPE A

Series IPT (26482 Type) Bayonet Coupler

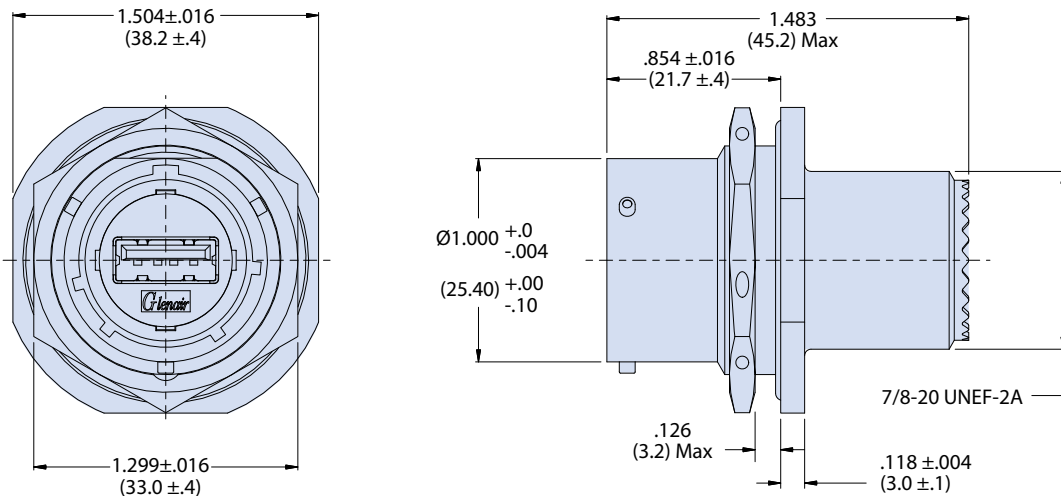


IPT340 Coupler with Accessory Threads and USB
Male-to-Female (Plug) or Female-to-Female (Receptacle)

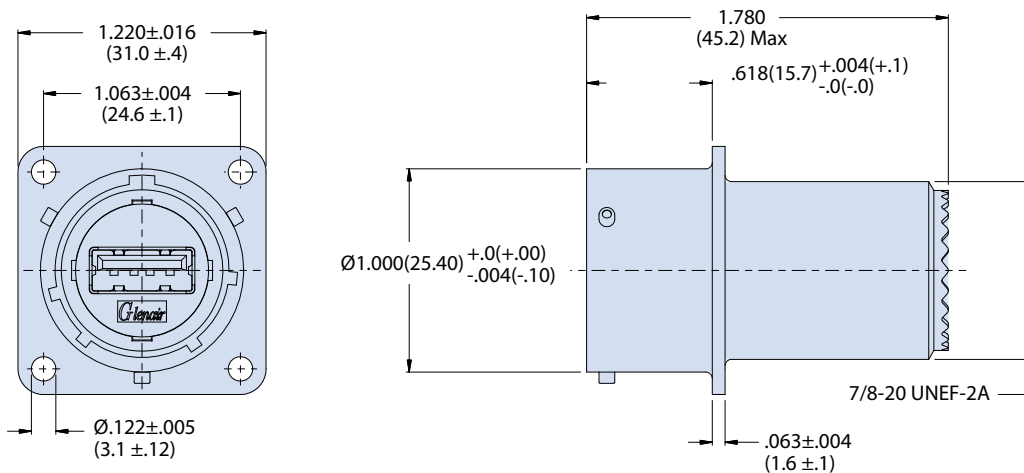
01 - INLINE RECEPTACLE WITH ACCESSORY THREADS



070 - REAR PANEL MOUNT JAM NUT RECEPTACLE WITH ACCESSORY THREADS



00 - WALL MOUNT RECEPTACLE WITH ACCESSORY THREADS





USB 2.0 TYPE A

Series IPT (26482 Type) Bayonet Coupler



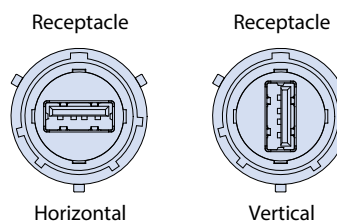
IPT342 Receptacle with USB Female Interface to PC Tail Termination

G



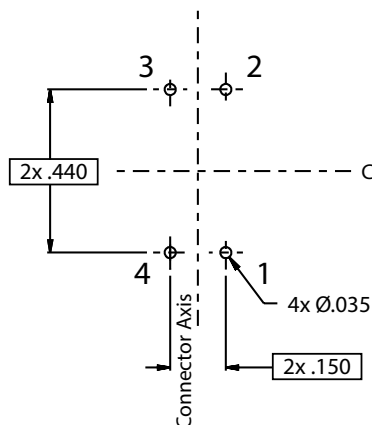
How to Order							
Sample Part Number	IPT342	02	16	2	A	H	F6
Basic Number	IPT342						
Connector Style ¹	02 = Wall Mount Receptacle 07 = Rear Panel Mount Jam Nut Receptacle						
Shell Size	16						
USB Performance	2 = 2.0						
USB Type	A = Type A						
Orientation Option	H = Horizontal V = Vertical						
Material/Finish	Omit for Cadmium/Olive Drab F6 = Black Polymer Electrocoat F7 = Conductive Black Zinc Nickel F11 = Electroless Nickel						

USB Orientation Options



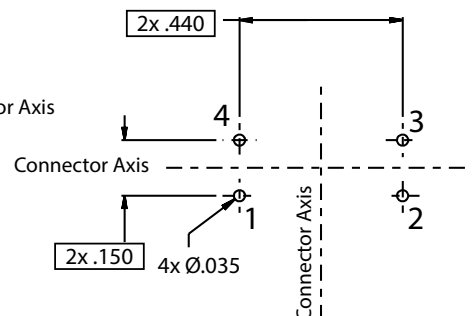
RECOMMENDED PCB LAYOUT

Receptacle USB 2.0 / Type A
(Horizontal Orientation)



Recommended
(Solder Side)

Receptacle USB 2.0 / Type A
(Vertical Orientation)



Recommended
(Solder Side)

NOTES

1. See Section A for panel cutout dimensions



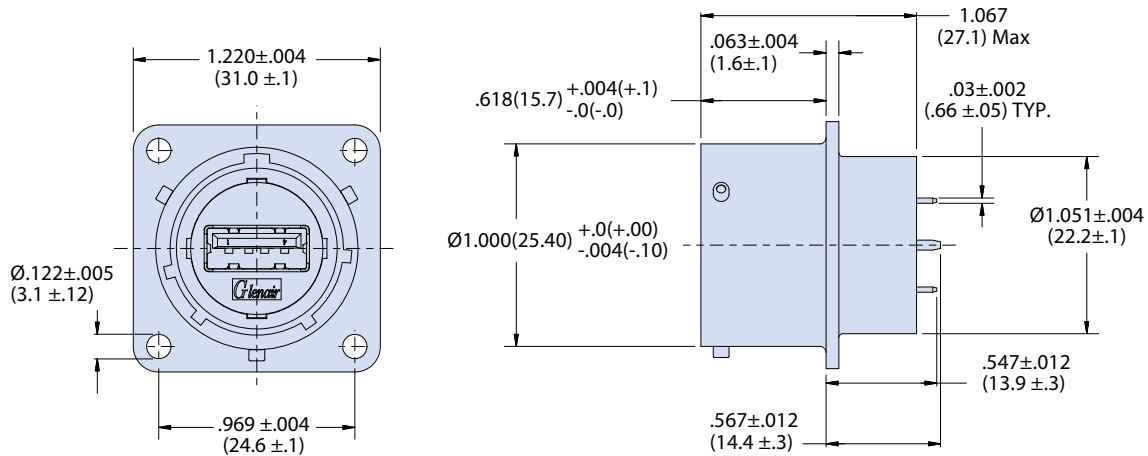
USB 2.0 TYPE A

Series IPT (26482 Type) Bayonet Coupler

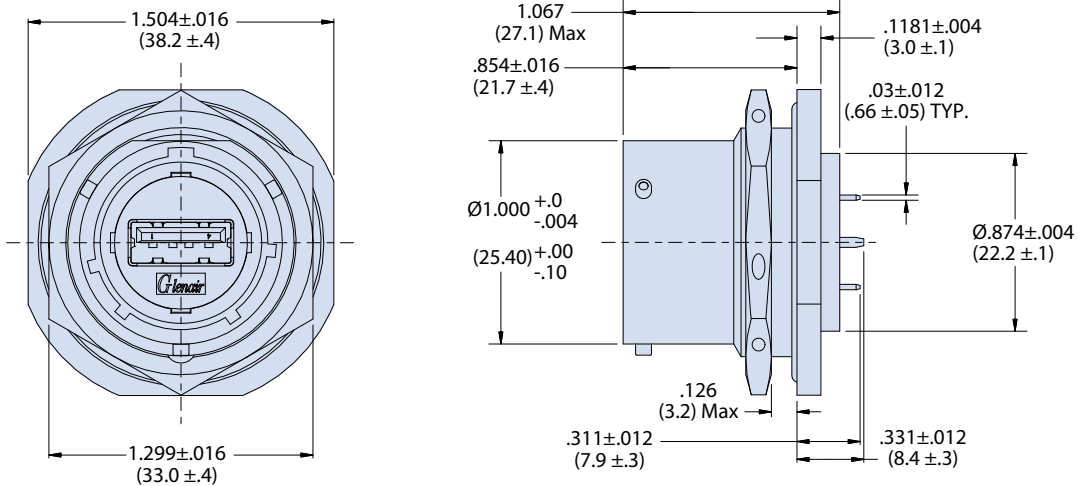


IPT342 Receptacle with
USB Female Interface to PC Tail Termination

02 - WALL MOUNT RECEPTACLE



07 - REAR PANEL MOUNT JAM NUT RECEPTACLE





USB 2.0 TYPE A

Series IPT (26482 Type) Bayonet Coupler



IPT343 Receptacle with USB

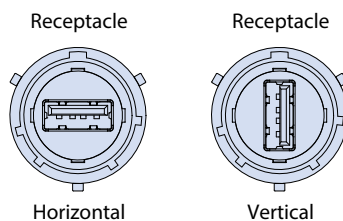
Female Interface to Solder Cup Termination

G



How to Order							
Sample Part Number	IPT343	02	16	2	A	H	F6
Basic Number	IPT343						
Connector Style ¹	02 = Wall Mount Receptacle 07 = Rear Panel Mount Jam Nut Receptacle						
Shell Size	16						
USB Performance	2 = 2.0						
USB Rear Jack Type	A = Type A						
Orientation Option	H = Horizontal V = Vertical						
Material/Finish	Omit for Cadmium/Olive Drab F6 = Black Polymer Electrocoat F7 = Conductive Black Zinc Nickel F11 = Electroless Nickel						

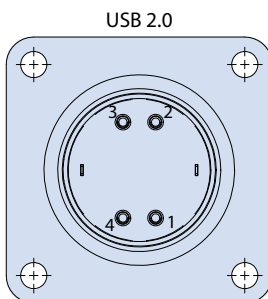
USB Orientation Options



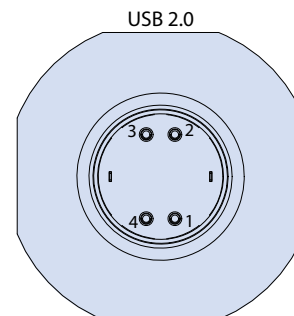
SOLDER CUP LAYOUTS FOR USB 2.0

Horizontal USB layout

-02 Style Solder Cup Layouts



-07 Style Solder Cup Layouts





USB 2.0 TYPE A

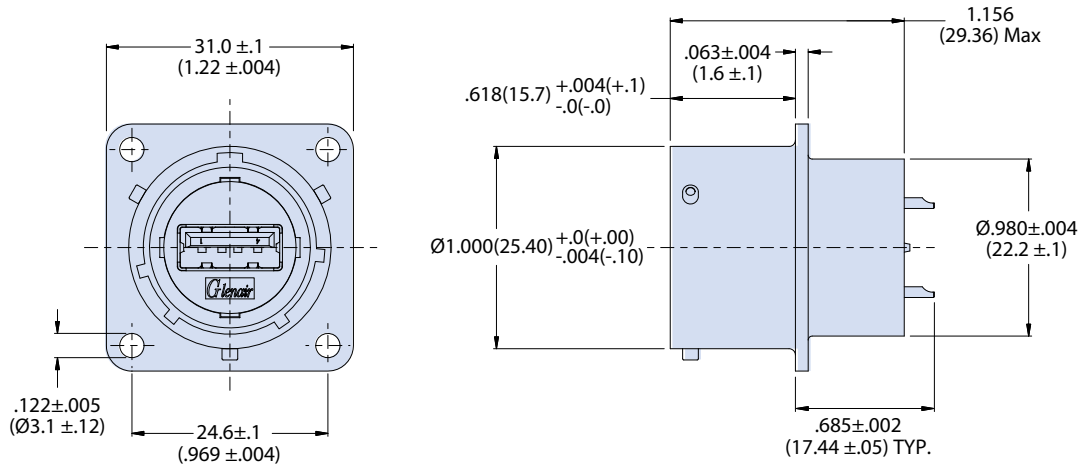
Series IPT (26482 Type) Bayonet Coupler



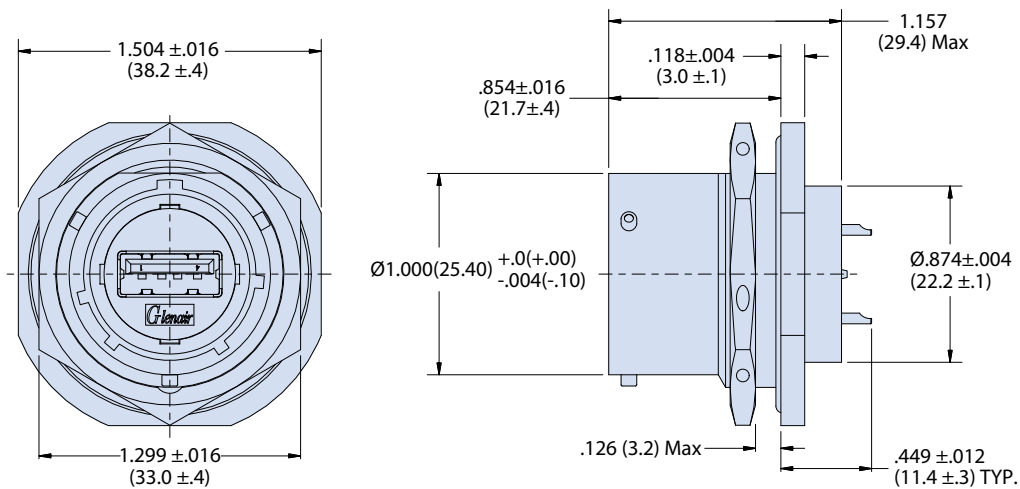
IPT343 Receptacle with USB

Female Interface to Solder Cup Termination

02 - WALL MOUNT RECEPTACLE



07 - REAR PANEL MOUNT JAM NUT RECEPTACLE



NOTES

1. See Section A panel cutout dimensions



USB 2.0 TYPE A

Series IPT (26482 Type) Bayonet Coupler



IPT345 Connectors with USB Male (Plug) or Female (Receptacle) Interface to Crimp Removable Contacts

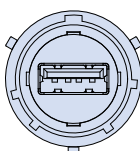
G



How to Order							
Sample Part Number	IPT345	00	16	2	A	H	F6
Basic Number	IPT345						
Connector Style	00 = Wall Mount Receptacle 070 = Rear Panel Mount Jam Nut Receptacle 06 = Straight Plug						
Shell Size	16						
USB Performance	2 = 2.0						
USB Rear Jack Type	A = Type A						
Orientation Option	H = Horizontal V = Vertical						
Material/Finish	Omit for Cadmium/Olive Drab F6 = Black Polymer Electrocoat F7 = Conductive Black Zinc Nickel F11 = Electroless Nickel						

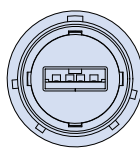
USB Orientation Options

Receptacle



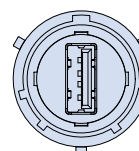
Horizontal

Plug



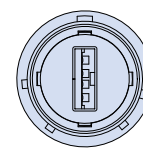
Horizontal

Receptacle



Vertical

Plug

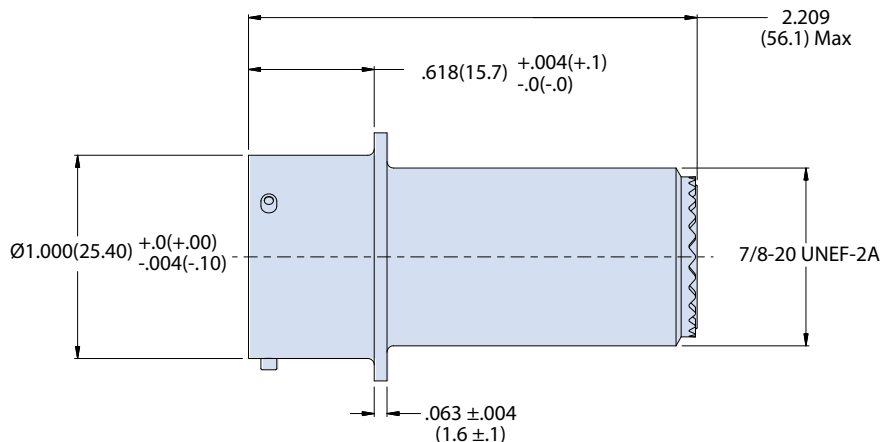
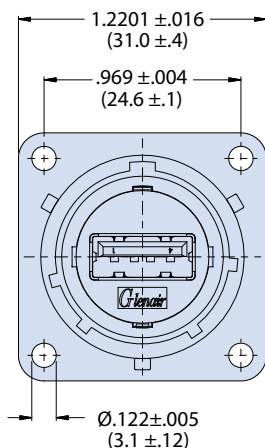


Vertical

NOTES

1. See Section A for panel cutout dimensions

00 - WALL MOUNT RECEPTACLE WITH ACCESSORY THREADS





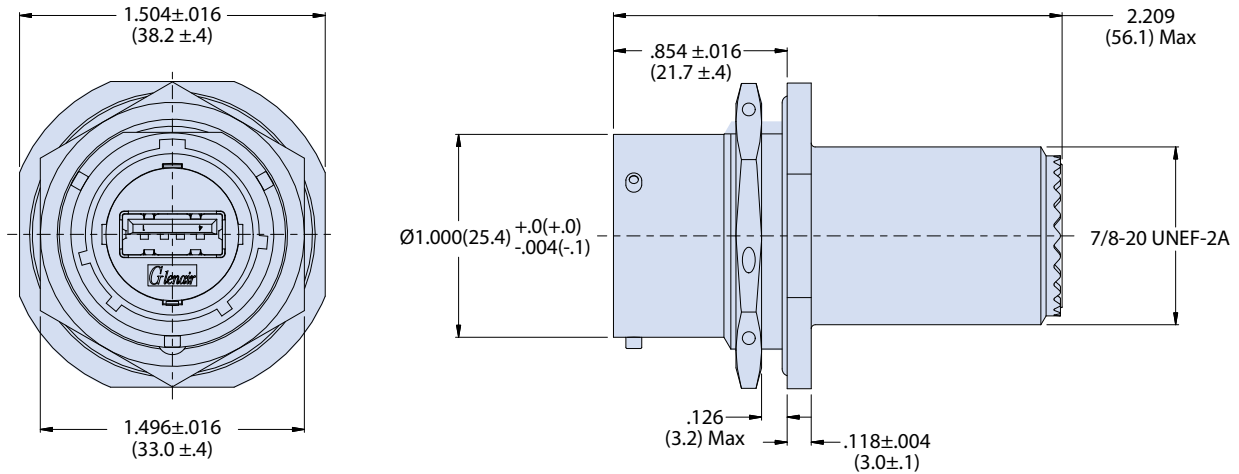
USB 2.0 TYPE A

Series IPT (26482 Type) Bayonet Coupler

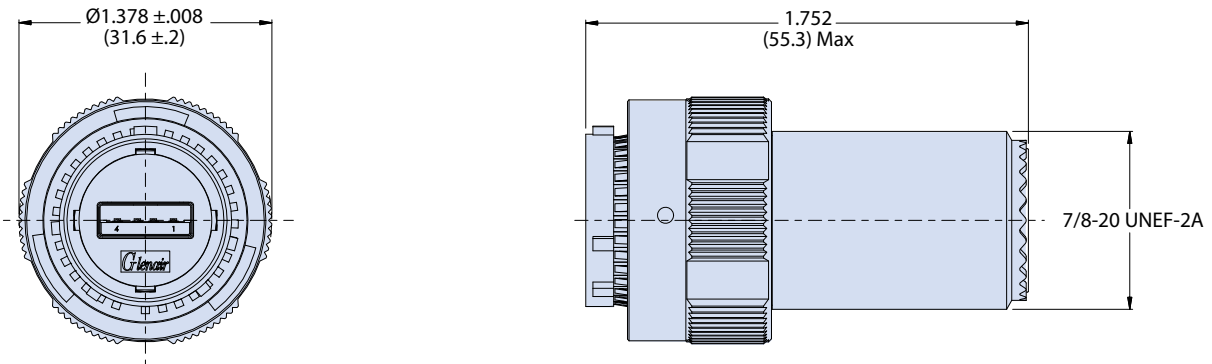


IPT345 Connectors with USB Male (Plug) or Female (Receptacle) Interface to Crimp Removable Contacts

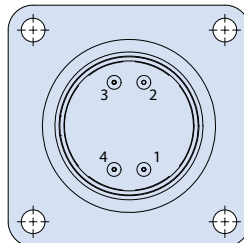
070 - REAR PANEL MOUNT JAM NUT RECEPTACLE WITH ACCESSORY THREADS



06 - PLUG WITH ACCESSORY THREADS



Crimp Contact Layout (Horizontal Orientation Shown)



USB 2.0 TYPE A

Series IPT (26482 Type) Bayonet Coupler



IPT370 Feedthrough Receptacle with USB Female-to-Female Interface

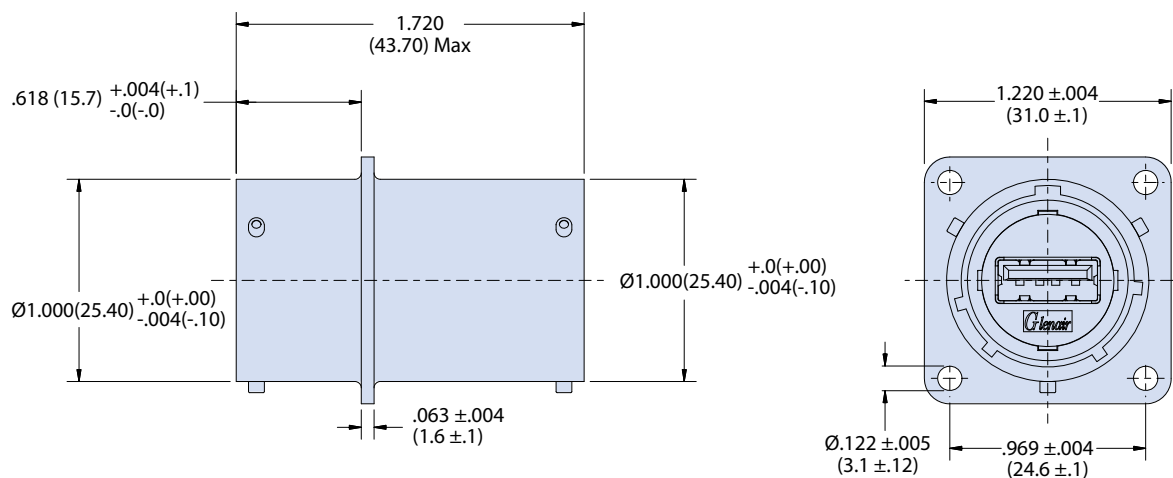
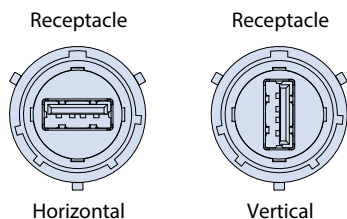


How to Order									
Sample Part Number	IPT370	02PP	16	2	A	A	H	F6	
Basic Number	IPT370								
Connector Style ¹	02PP = Rear Panel Mounting Receptacle Bulkhead Feed Through								
Shell Size	16								
USB Performance	2 = 2.0								
USB Rear Jack Type	A = Type A								
USB Front Jack Type	A = Type A								
USB Orientation	H = Horizontal V = Vertical								
Material/Finish	Omit for Cadmium/Olive Drab F6 = Black Polymer Electrocoat F7 = Conductive Black Zinc Nickel F11 = Electroless Nickel								

NOTES

1. See Section A for panel cutout dimensions and complete finish options

USB Orientation Options





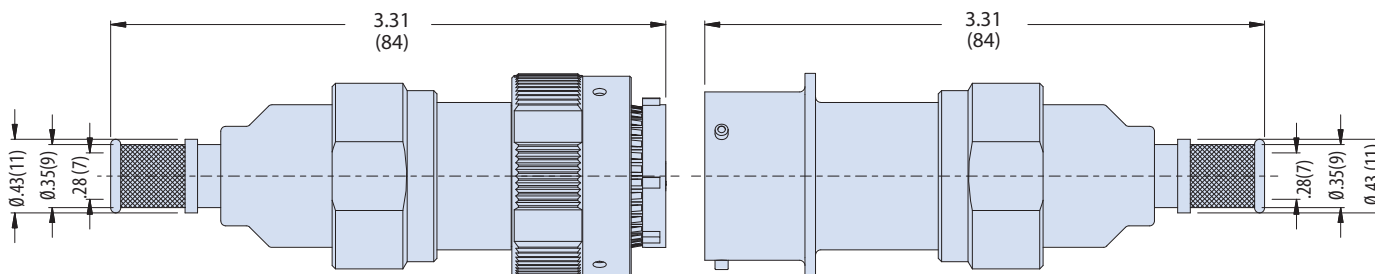
USB 2.0 TYPE A

Series IPT (26482 Type) Bayonet Coupler

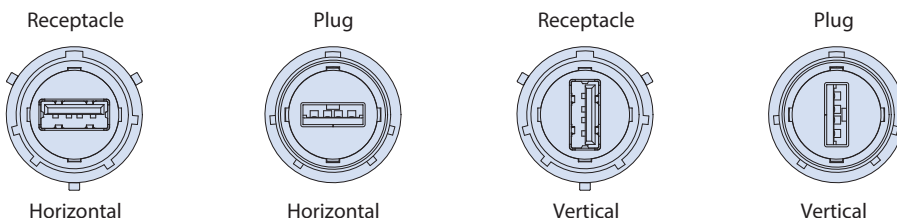


IPT340H Connector and Backshell with Banding Porch and Shrink Boot Groove

How to Order									
Sample Part Number	IPT340H 00 16 2 A A H ZL F6								
Basic Number	IPT340H								
Connector Style ¹	00 = Wall Mount Receptacle with Accessory Threads 01 = InLine Receptacle with Accessory Threads 070 = Rear Panel Mount Jam Nut Receptacle with Accessory Threads 06 = Straight Plug Connector with Accessory Threads								
Shell Size	16								
USB Performance	2 = 2.0								
USB Rear Jack Type	A = Type A								
USB Front Jack Type	A = Type A								
USB Orientation	H = Horizontal V = Vertical								
Backshell	ZL = With banding platform for direct attachment of cable shield and shrink boot groove								
Material/Finish	Omit for Cadmium/Olive Drab F7 = Conductive Black Zinc Nickel F6 = Black Polymer Electrocoat F11 = Electroless Nickel								



USB Orientation Options



HEAT SHRINK BOOT



NOTES

1. See Section A for panel cutout dimensions

Glenair P/N : 770-004S903W2

Must be ordered separately

Type 9 flexible polyolefin short profile boots have an operating temperature range of -40°C to 100°C and provide very good resistance to fuels, oils and solvents. These boots fit most standard boot adapters for circular connectors and are specifically designed for low temperature rated CAT5e and USB cables.



USB 2.0 TYPE A

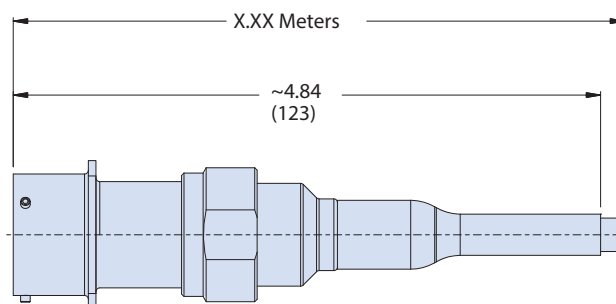
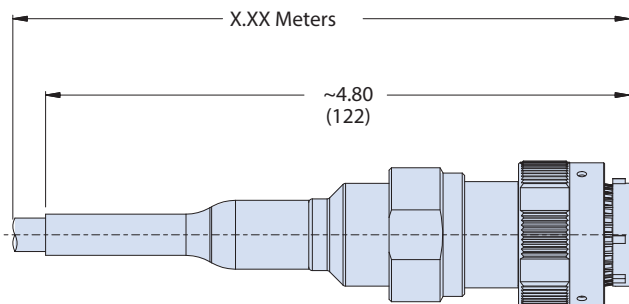
Series IPT (26482 Type) Bayonet Coupler



IPT340H Connector and Backshell with Pigtail

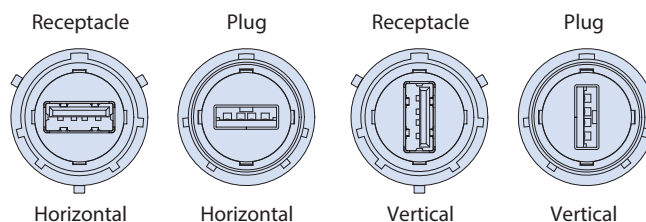
G

How to Order												
Sample Part Number			IPT340H	00	16	2	A	A	H	ZL	0.5	F6
Basic Number	IPT340H											
Connector Style¹	00 = Wall Mount Receptacle 01 = InLine Receptacle 070 = Rear Panel Mounting Jam Nut Receptacle 06 = Straight Plug Connector											
Shell Size	16											
USB Performance	2 = 2.0											
USB Rear Jack Type	A = Type A											
USB Front Jack Type	A = Type A											
USB Orientation	H = Horizontal V = Vertical											
Backshell	ZL = Backshell with banding platform for direct attachment of cable shield and shrink boot pre-installed											
Cable Length	0.5 = 0.5 inch pigtail (See High Data Rate Cable P/N 963-012)											
Material/Finish	Omit for Cadmium/Olive Drab F6 = Black Polymer Electrocoat		F7 = Conductive Black Zinc Nickel F11 = Electroless Nickel									



Plug and Receptacle with Pigtail

USB Orientation Options



NOTES

1. See Section A for panel cutout dimensions



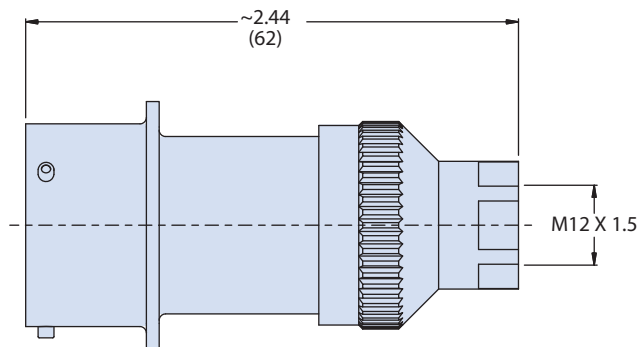
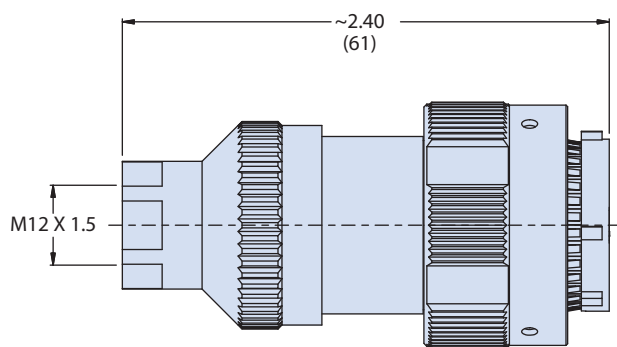
USB 2.0 TYPE A Series IPT (26482 Type) Bayonet Coupler

IPT340H Connector with Internal Metric Thread Backshell



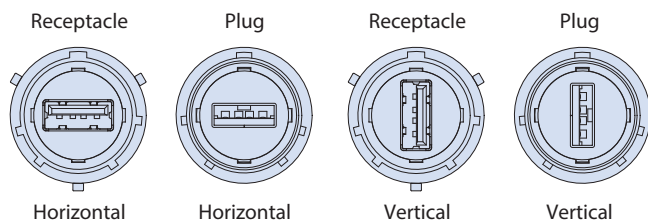
G

How to Order										
Sample Part Number			IPT340H	00	16	2	A	A	H	M F6
Basic Number	IPT340H									
Connector Style¹	00 = Wall Mount Receptacle 01 = InLine Receptacle 070 = Rear Panel Mounting Jam Nut Receptacle 06 = Straight Plug Connector									
Shell Size	16									
USB Performance	2 = 2.0									
USB Rear Jack Type	A = Type A									
USB Front Jack Type	A = Type A									
Orientation Option	H = Horizontal V = Vertical									
Backshell	M = Backshell with metric thread									
Material/Finish	Omit for Cadmium/Olive Drab F6 = Black Polymer Electrocoat F7 = Conductive Black Zinc Nickel F11 = Electroless Nickel									



Plug and Receptacle without Cable Gland
(Other Backshell options are available, please consult the factory)

USB Orientation Options



NOTES

1. See Section A panel cutout dimensions



USB 2.0 TYPE A

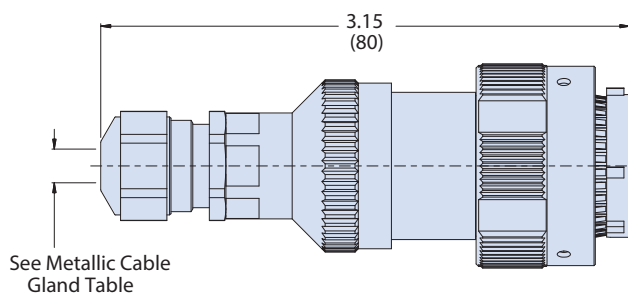
Series IPT (26482 Type) Bayonet Coupler



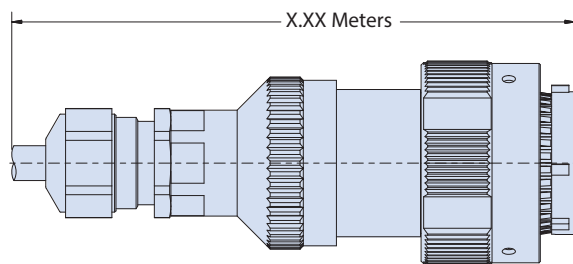
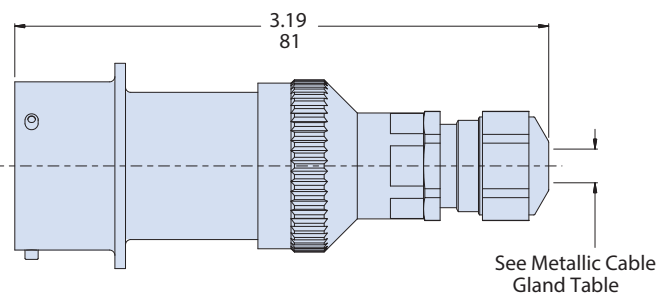
IPT340H Connector and Backshell with Cable Gland, with or without Pigtails

G

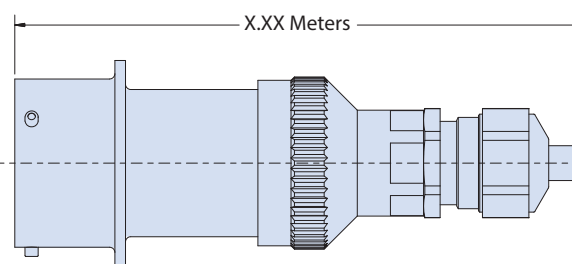
How to Order												
Sample Part Number			IPT340H	00	16	2	A	A	H	MS1	0.5	F6
Basic Number	IPT340H											
Connector Style ¹	00 = Wall Mount Receptacle 01 = InLine Receptacle 070 = Rear Panel Mounting Jam Nut Receptacle 06 = Straight Plug Connector with Accessory Threads											
Shell Size	16											
USB Performance	2 = 2.0											
USB Rear Jack Type	A = Type A											
USB Front Jack Type	A = Type A											
USB Orientation	H = Horizontal V = Vertical											
Metallic Cable Gland	M1, M2, MS1, MS2 See Metallic Cable Gland Table											
Cable Length	0.5 = 0.50 inch pigtail Omit for None											
Material/Finish	Omit for Aluminum/Cadmium, Olive Drab (G3) F6 = Black Polymer Electrocoat			F7 = Conductive Black Zinc Nickel F11 = Electroless Nickel								



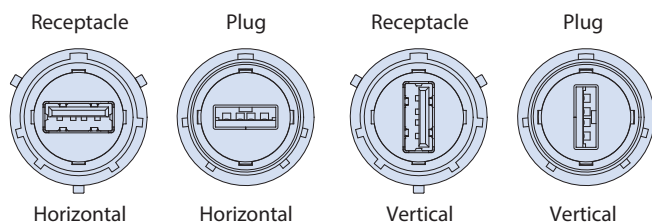
Plug and Receptacle without Pigtail



Plug and Receptacle with Pigtail



USB Orientation Options



Metallic Cable Gland		
Type	Cable Range	Shield
M1	.13 - .19 (3.5 - 5)	No
M2	.25 - .31 (6.5 - 8)	No
MS1	.17 - .23 (4.5 - 6)	Yes
MS2	.23 - .29 (6 - 7.5)	Yes

NOTES

1. See Section A for panel cutout dimensions



RJ12, RJ45, AND USB 2.0 TYPE A SuperSeal™ 28840 Type Connectors

Product Selection Guide



H



900-320

Page H-2

SuperSeal™ Coupler with Accessory Threads and RJ12 Plug-to-Jack (Plug) or Jack-to-Jack (Receptacle).



900-300

Page H-4

SuperSeal™ Coupler with Accessory Threads and RJ45 Plug-to-Jack (Plug) or Jack-to-Jack (Receptacle).



900-301

Page H-6

SuperSeal™ Connector with Accessory Threads and RJ45 Plug (Plug) or Jack (Receptacle) to Crimp Removable Contacts.



900-340

Page H-8

SuperSeal™ Coupler with Accessory Threads and USB Male-to-Female (Plug) or Female-to-Female (Receptacle).



900-345

Page H-10

SuperSeal™ Connector with Accessory Threads and USB Male (Plug) or Female (Receptacle) to Crimp Removable Contacts.



RJ12 PHONE INTERFACE 28840 SuperSeal™



900-320 Coupler with Accessory Threads and RJ12 Plug-to-Jack (Plug) or Jack-to-Jack (Receptacle)

How to Order							
Part Number Example	900-320	NF	D0	-	17	1	1
Basic Number	900-320						
Material/Finish	See Material and Finish Options Table						
Connector Style	D0 = Receptacle, Wall Mount 05 = Receptacle, Inline 07 = Receptacle, Jam Nut G6 = Plug						
Shielding	- = Inline Shielded RJ45 G = Inline Shielded and Grounded to Shell (See Note 2)						
Shell Size	15 or 17						
Alternate Polarization	1, 2, 3, 4, 5, 6 See Section A for details (Per MIL-DTL-28840)						
RJ12 Orientation Option	1, 2, 3, 4 (See below for options)						

NOTES

1. Receptacle meets IP67 requirements in the unmated condition and plug meets IP68 requirements in the mated condition, consult factory for details.
2. "G" option only with receptacle.
3. Connector accessory features per M28840 connector designator G. Consult factory for accessory selection.

SPECIFICATIONS

- RJ12 coupler maintains shield continuity
- Wiring: straight through
- RoHS compliant
- Electrical: current rating: 1.5 Amp
- D.W.V.: 1000 VDC (700 VAC)
- Operating temperature: -40°C to +120°C

Wall Mount & Inline Receptacle Dimensions						
Shell Size	A Thread	B Sq	C Bsc	D Thread	E	ØF
15	1.062-.1P-.2L-DS-2A	1.278 (32.46) 1.238 (31.45)	.968 (24.59)	1.000-20 UNEF 2A	1.080 (27.43) 1.070 (27.18)	1.275 (32.39) 1.255 (31.88)
17	1.125-.1P-.2L-DS-2A	1.403 (35.64) 1.363 (34.62)	1.015 (25.78)	1.125-18 UNEF 2A	1.143 (29.03) 1.133 (28.78)	1.338 (33.99) 1.318 (33.48)

Jam Nut Receptacle & Plug Dimensions					
Shell Size	ØG	H	J Flat	K Thread	ØL Max
15	1.681 (42.70) 1.661 (42.19)	1.587 (40.31) 1.567 (39.80)	1.153 (29.29) 1.144 (29.06)	1.1875-18 UNEF 2A	1.263 (32.08)
17	1.743 (44.27) 1.723 (43.76)	1.649 (41.88) 1.629 (41.38)	1.216 (30.89) 1.207 (30.66)	1.250-18 UNEF 2A	1.387 (35.23)

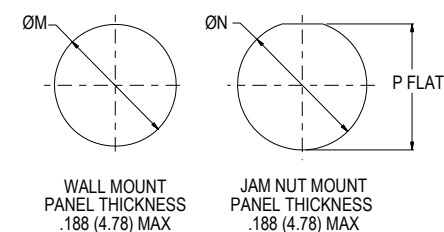
Material and Finish Options		
Code	Material	Finish Description
NF	Aluminum	Cadmium O. D. Over Electroless Nickel (500 hour Salt Spray)
ZN		Zinc Nickel, Olive Drab
MT		Nickel-PTFE, 1000 Hour Grey™
Z1	Stainless Steel	Passivate
ZU		Black Cadmium Over Nickel
AB	Marine Bronze	None (Clean Only)

Wiring Diagram*			
Pin	Modern Color Code (UTP)	Old Color Code	Destination
1	white/green	white	T3 (Tip 3)
2	white/orange	black	T2 (Tip 2)
3	blue/white	red	R1 (Ring 1)
4	white/blue	green	T1 (Tip 1)
5	orange/white	orange	R2 (Ring 2)
6	green/white	blue	R3 (Ring 3)

- Pair 1 = Primary dial tone or talk circuit on a single line
- Pair 2 = Secondary dial tone on a two line or data control circuit for an electronic key phone
- Pair 3 = Third dial tone on a three line or an accessory circuit for an electronic key phone

*Wiring Diagram based on industry standard USOC-6

Recommended Panel Cutouts			
Shell Size	ØM	ØN	P Flat
15	1.124 (28.55)	1.203 (30.56) 1.193 (30.30)	1.165 (29.59) 1.155 (29.34)
17	1.187 (30.15)	1.265 (32.13) 1.255 (31.88)	1.228 (31.19) 1.218 (30.94)



RJ12 JACK ORIENTATION OPTIONS

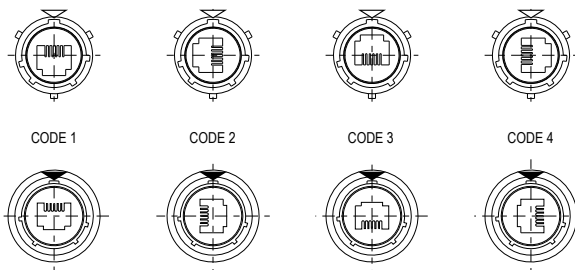
▽ = KEYWAY

RJ12 JACK ORIENTATION OPTIONS

(Partial Front Views Shown)

▼ = KEY

RJ12 PLUG ORIENTATION OPTIONS



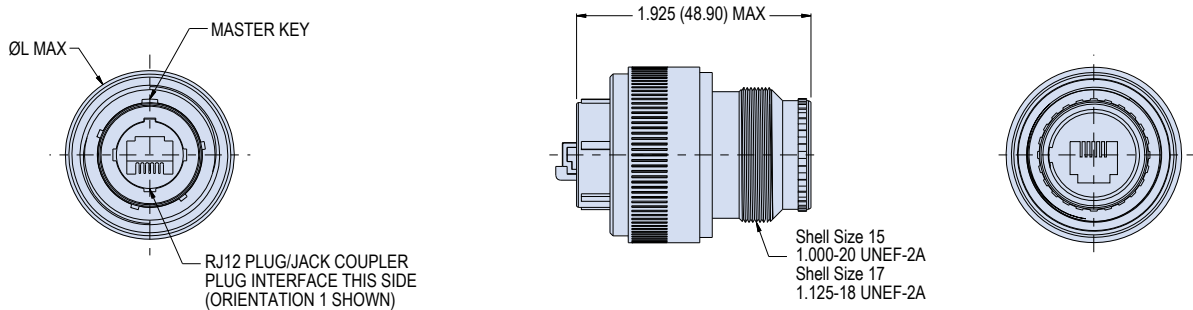


RJ12 PHONE INTERFACE 28840 SuperSeal™

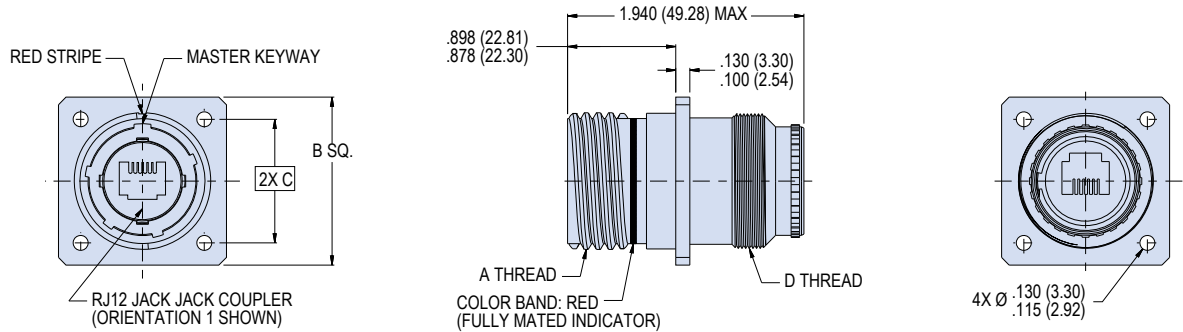


900-320 Coupler with Accessory Threads and RJ12 Plug-to-Jack (Plug) or Jack-to-Jack (Receptacle)

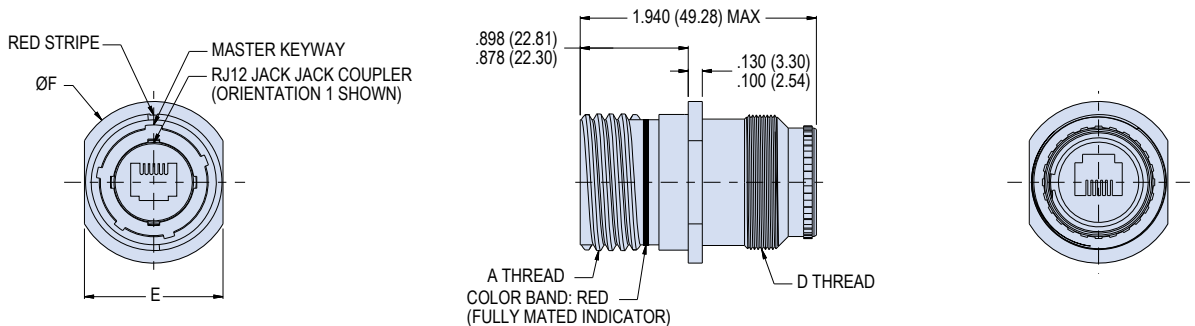
G6 - PLUG (JAM NUT RECEPTACLE & PLUG DIMENSIONS TABLE)



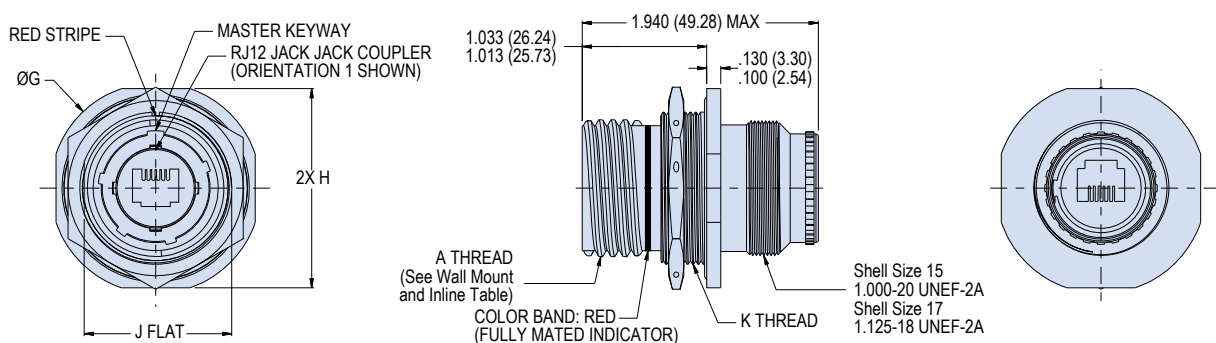
D0 - WALL MOUNT RECEPTACLE (SEE WALL MOUNT & INLINE RECEPTACLE DIMENSIONS TABLE)



05 - RECEPTACLE, INLINE (SEE WALL MOUNT & INLINE RECEPTACLE DIMENSIONS TABLE)



07 - JAM NUT MOUNT RECEPTACLE (JAM NUT RECEPTACLE & PLUG DIMENSIONS TABLE)





RJ45 CAT 5E ETHERNET 28840 SuperSeal™



900-300 Coupler with Accessory Threads and RJ45 Plug-to-Jack (Plug) or Jack-to-Jack (Receptacle)

How to Order									
Part Number Example	900-300	NF	D0	-	17	5H	1	1	
Basic Number	900-300								
Material/Finish	See Material and Finish Options Table								
Connector Style	D0 = Receptacle, Wall Mount 05 = Receptacle, Inline 07 = Receptacle, Jam Nut G6 = Plug								
Shielding	- = Inline Shielded RJ45 G = Inline Shielded and Grounded to Shell								
Shell Size	17 or 19 (See Note 1)								
RJ45 Category	5H = Cat 5E For Cat 6A applications consult factory								
Alternate Polarization	1, 2, 3, 4, 5, 6 See connector specifications page for further information (Per MIL-DTL-28840)								
RJ45 Orientation Option	1, 2, 3, 4 (See below for options)								

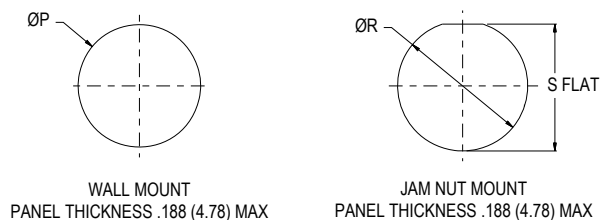
Wall Mount & Inline Receptacle Dimensions						
Shell Size	A Thread	B Sq	C Bsc	D Thread	E	ØF
17	1.125-.1P-.2L-DS-2A	1.403 (35.64) 1.363 (34.62)	1.015 (25.78)	1.125-18 UNEF 2A	1.143 (29.03) 1.133 (28.78)	1.338 (33.99) 1.318 (33.48)
19	1.312-.1P-.2L-DS-2A	1.528 (38.81) 1.488 (37.80)	1.140 (28.96)	1.250-18 UNEF 2A	1.330 (33.78) 1.320 (33.53)	1.525 (38.74) 1.505 (38.23)

Jam Nut Receptacle & Plug Dimensions						
Shell Size	ØG	H	J Flat	K Thread	ØL	ØN Max
17	1.743 (44.27) 1.723 (43.76)	1.649 (41.88) 1.629 (41.38)	1.216 (30.89) 1.207 (30.66)	1.250-18 UNEF 2A	1.354 (34.39) 1.344 (34.14)	1.387 (35.23)
19	1.931 (49.05) 1.911 (48.54)	1.837 (46.66) 1.817 (46.16)	1.403 (35.64) 1.394 (35.41)	1.4375-18 UNEF 2A	1.542 (39.17) 1.532 (38.91)	1.513 (38.43)

Panel Cutouts			
Shell Size	ØP	ØR	S Flat
17	1.187 (30.15)	1.265 (32.13) 1.255 (31.88)	1.228 (31.19) 1.218 (30.94)
19	1.374 (34.90)	1.453 (36.91) 1.443 (36.65)	1.415 (35.94) 1.405 (35.69)

Material and Finish Options		
Code	Material	Finish Description
NF	Aluminum	Cadmium O. D. Over Electroless Nickel (500 hour Salt Spray)
ZN		Zinc Nickel, Olive Drab
MT		Nickel-PTFE, 1000 Hour Grey™
Z1	Stainless Steel	Passivate
ZU		Black Cadmium Over Nickel
AB	Marine Bronze	None (Clean Only)

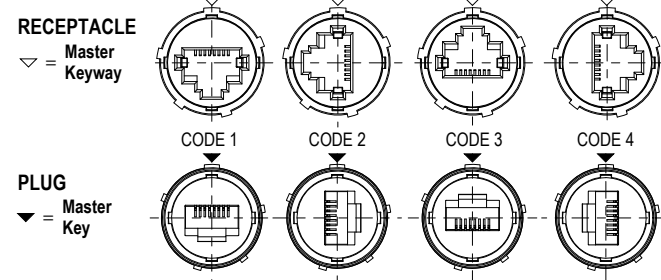
RECOMMENDED PANEL CUT-OUTS



NOTES

- Size 17 uses rear shielding sleeve.
Size 19 uses front and rear shielding sleeve.
- Connector accessory features per M28840 connector designator G. Consult factory for accessory selection.
- Receptacle connector meets IP67 requirements in the unmated condition and plug meets IP68 requirements in the mated condition, consult factory for details.

RJ45 ORIENTATION OPTIONS



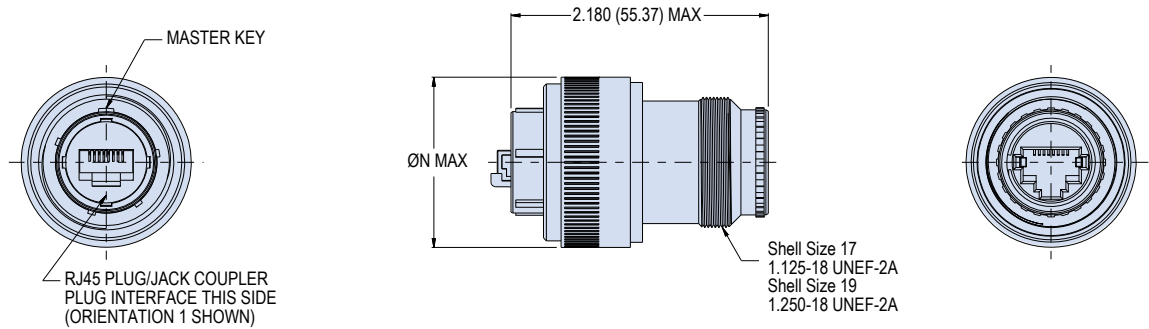


RJ45 CAT 5E ETHERNET 28840 SuperSeal™

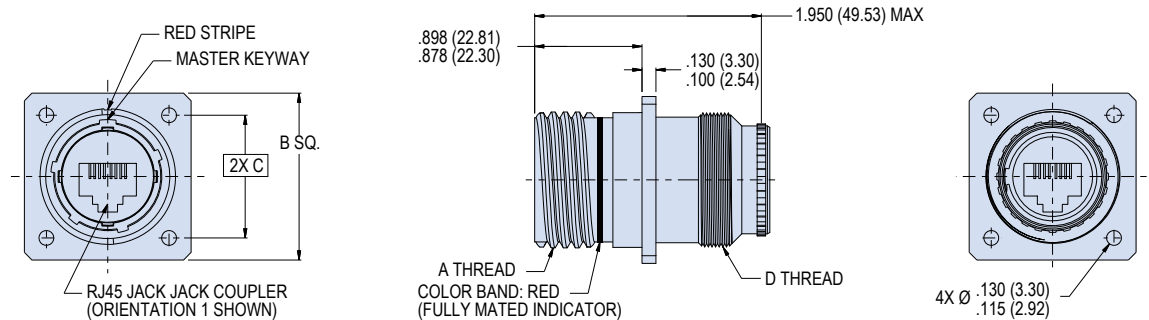


900-300 Coupler with Accessory Threads and RJ45
Plug-to-Jack (Plug) or Jack-to-Jack (Receptacle)

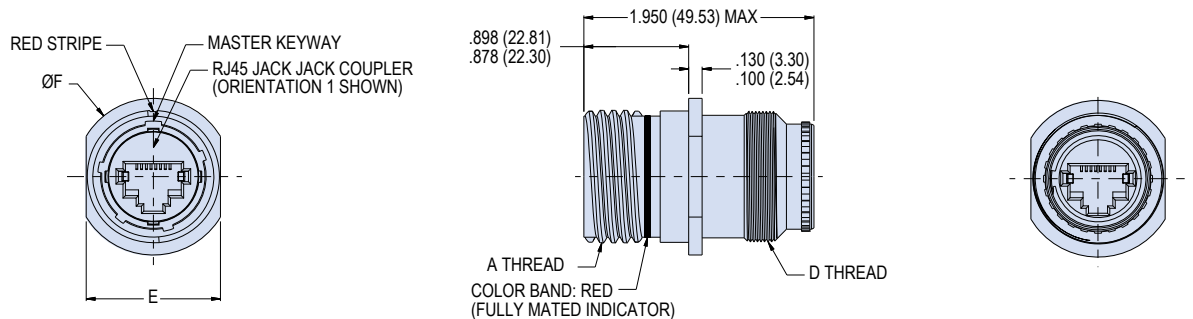
G6 - PLUG (JAM NUT RECEPTACLE & PLUG DIMENSIONS TABLE)



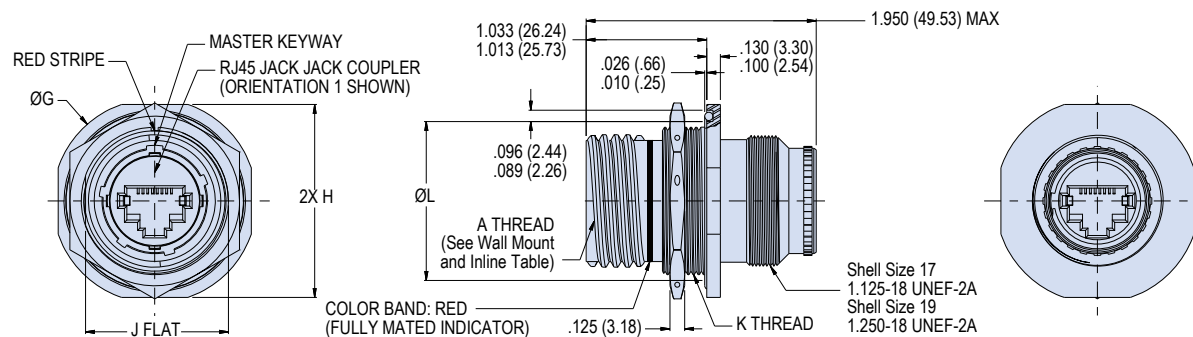
D0 - WALL MOUNT RECEPTACLE (WALL MOUNT & INLINE RECEPTACLE DIMENSIONS TABLE)



05 - RECEPTACLE, INLINE (WALL MOUNT & INLINE RECEPTACLE DIMENSIONS TABLE)



07 - JAM NUT MOUNT RECEPTACLE (JAM NUT RECEPTACLE & PLUG DIMENSIONS TABLE)





RJ45 CAT 5E ETHERNET 28840 SuperSeal™



900-301 Connector with RJ45 Plug (Plug) or Jack (Receptacle) to Crimp Removable Contacts

H

How to Order									
Part Number Example	900-301	NF	D0	-	17	5H	1	1	
Basic Number	900-301 = Connector with Accessory Threads								
Material/Finish	See Material and Finish Options Table								
Connector Style	D0 = Receptacle, Wall Mount 05 = Receptacle, Inline 07 = Receptacle, Jam Nut G6 = Plug								
Shielding	- = Inline Shielded RJ45 G = Inline Shielded and Grounded to Shell (See Note 4)								
Shell Size	17 or 19								
RJ45 Category	5H = CAT5E For Cat 6A applications consult factory								
Alternate Polarization	1, 2, 3, 4, 5, 6 See connector specifications page for further information (Per MIL-DTL-28840)								
RJ45 Orientation	1, 2, 3, 4 (See below for options)								

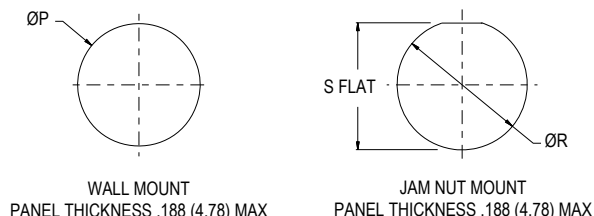
Wall Mount & Inline Receptacle Dimensions						
Shell Size	A Thread	B Sq	C Bsc	D Thread	E	ØF
17	1.125-.1P-.2L-DS-2A	1.403 (35.64) 1.363 (34.62)	1.015 (25.78)	1.125-18 UNEF 2A	1.143 (29.03) 1.133 (28.78)	1.338 (33.99) 1.318 (33.48)
19	1.312-.1P-.2L-DS-2A	1.528 (38.81) 1.488 (37.80)	1.140 (28.96)	1.250-18 UNEF 2A	1.330 (33.78) 1.320 (33.53)	1.525 (38.74) 1.505 (38.23)

Jam Nut Receptacle & Plug Dimensions					
Shell Size	ØG	H	J Flat	K Thread	ØL Max
17	1.743 (44.27) 1.723 (43.76)	1.649 (41.88) 1.629 (41.38)	1.216 (30.89) 1.207 (30.66)	1.250-18 UNEF 2A	1.387 (35.23)
19	1.931 (49.05) 1.911 (48.54)	1.837 (46.66) 1.817 (46.16)	1.403 (35.64) 1.394 (35.41)	1.4375-18 UNEF 2A	1.513 (38.43)

Panel Cutouts			
Shell Size	ØP	ØR	S Flat
17	1.187 (30.15)	1.265 (32.13) 1.255 (31.88)	1.228 (31.19) 1.218 (30.94)
19	1.374 (34.90)	1.453 (36.91) 1.443 (36.65)	1.415 (35.94) 1.405 (35.69)

Material and Finish Options		
Code	Material	Finish Description
NF	Aluminum	Cadmium O. D. Over Electroless Nickel (500 hour Salt Spray)
ZN		Zinc Nickel, Olive Drab
MT		Nickel-PTFE, 1000 Hour Grey™
Z1	Stainless Steel	Passivate
ZU		Black Cadmium Over Nickel
AB	Marine Bronze	None (Clean Only)

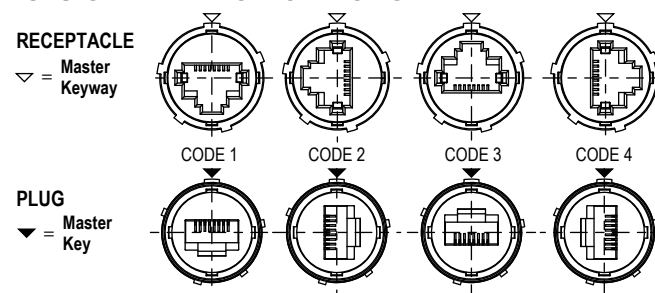
RECOMMENDED PANEL CUT-OUTS



NOTES

- Connector meets general requirements of MIL-DTL-28840 and RJ45 connector meets TIA 568B standard.
- Crimp removable contacts to conform to M39029/58-360 - size 22 pin contacts supplied loose.
- Receptacle connector designed to meet IP67 unmated condition. Plug connector designed to meet IP68 mated condition, consult factory for detailed information.
- "G" indicates RJ45 coupler is shielded inline and grounded to shell.
- Connector accessory features per M28840 connector designator G. Consult factory for crimp tool and accessory selection.

RJ45 ORIENTATION OPTIONS



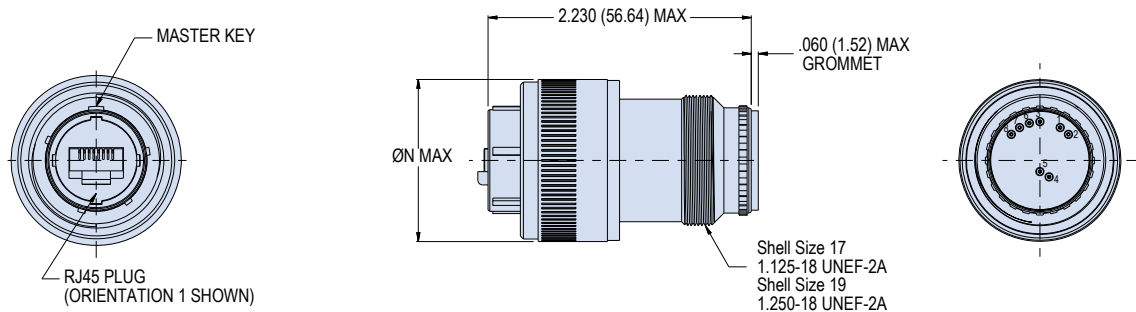


RJ45 CAT 5E ETHERNET 28840 SuperSeal™

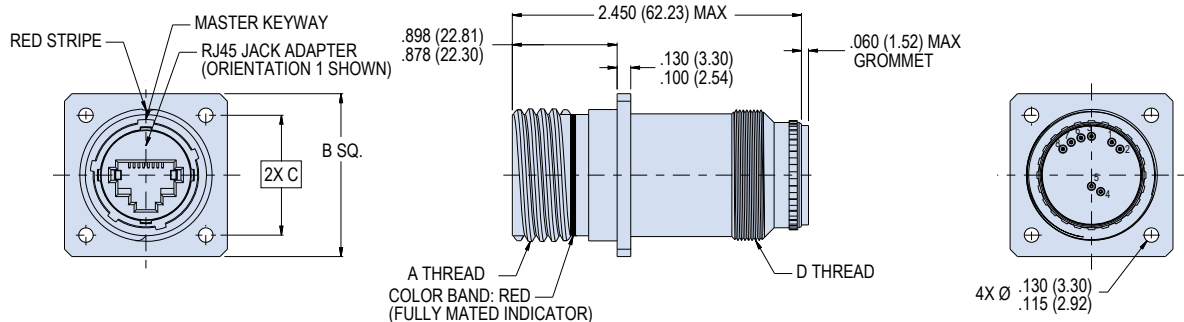


900-301 Connector with RJ45 Plug (Plug) or
Jack (Receptacle) to Crimp Removable Contacts

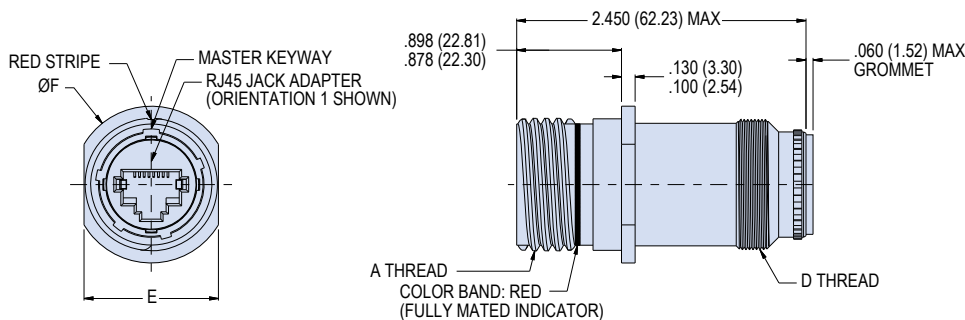
G6 - PLUG (JAM NUT RECEPTACLE & PLUG DIMENSIONS TABLE)



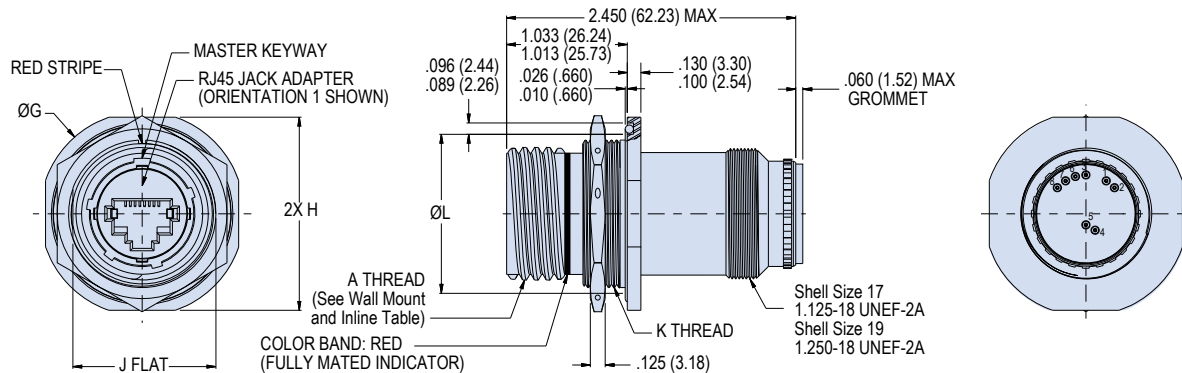
D0 - WALL MOUNT RECEPTACLE (WALL MOUNT & INLINE RECEPTACLE DIMENSIONS TABLE)



05 - RECEPTACLE, INLINE (WALL MOUNT & INLINE RECEPTACLE DIMENSIONS TABLE)



07 - JAM NUT MOUNT RECEPTACLE (JAM NUT RECEPTACLE & PLUG DIMENSIONSTABLE)





USB 2.0 TYPE A 28840 SuperSeal™



900-340 Coupler with Accessory Threads and USB
Male-to-Female (Plug) or Female-to-Female (Receptacle)

H

How to Order										
Part Number Example		900-340	NF	D0	-15	2	A	A	1	H
Basic Number	900-340									
Material/Finish	See Material and Finish Options Table									
Connector Style	D0 = Receptacle, Wall Mount 05 = Receptacle, Inline 07 = Receptacle, Jam Nut G6 = Plug									
Shell Size	15									
USB Performance	2 = USB 2.0									
USB Interface Type (Front)	A = Type A									
USB Interface Type (Back)	A = Type A									
Alternate Polarization	1, 2, 3, 4, 5, and 6 See connector specifications page for further information (Per MIL-DTL-28840)									
USB Orientation	H = Horizontal V = Vertical (See below for options)									

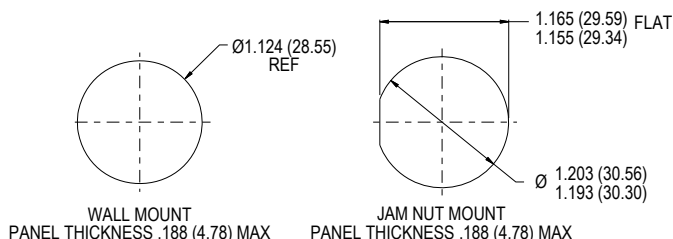
USB 2.0 Wiring			
Pin	Name	Cable Color (USB)	Description
1	(V BUS)	Red	+5 V
2	(D-)	White	Data -
3	(D+)	Green	Data +
4	(GND)	Black	Ground

Material and Finish Options		
Code	Material	Finish Description
NF	Aluminum	Cadmium O. D. Over Electroless Nickel (500 hour Salt Spray)
ZN		Zinc Nickel, Olive Drab
MT		Nickel-PTFE, 1000 Hour Grey™
Z1	Stainless Steel	Passivate
ZU		Black Cadmium Over Nickel
AB	Marine Bronze	None (Clean Only)

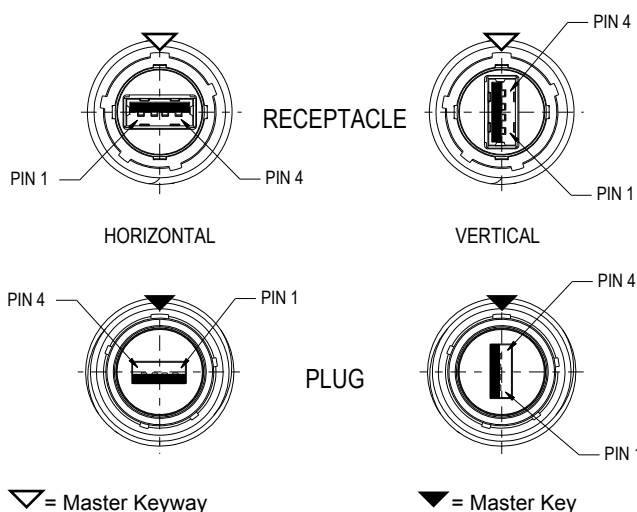
NOTES

1. Connector and contacts shall meet general requirements of MIL-DTL-28840 and USB receptacle meets USB 2.0 standard.
2. Connector meets IP67 in the unmated condition.
3. Connector accessory features per M28840 connector designator G. Consult factory for shrink boot option and accessory selection.

RECOMMENDED PANEL CUT-OUTS



USB ORIENTATION OPTIONS



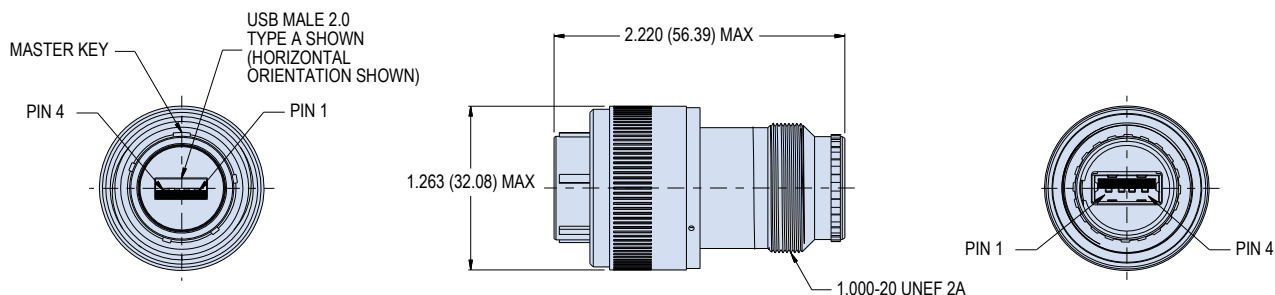


USB 2.0 TYPE A 28840 SuperSeal™

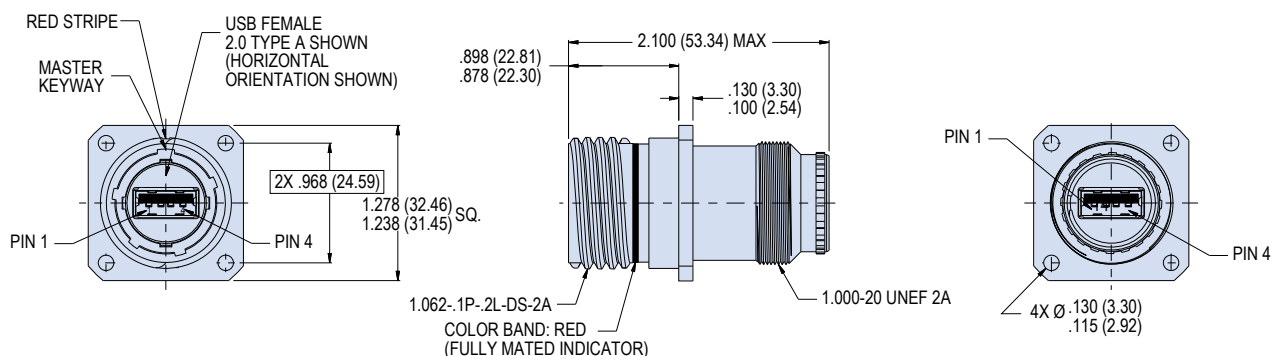


900-340 Coupler with Accessory Threads and USB Male-to-Female (Plug) or Female-to-Female (Receptacle)

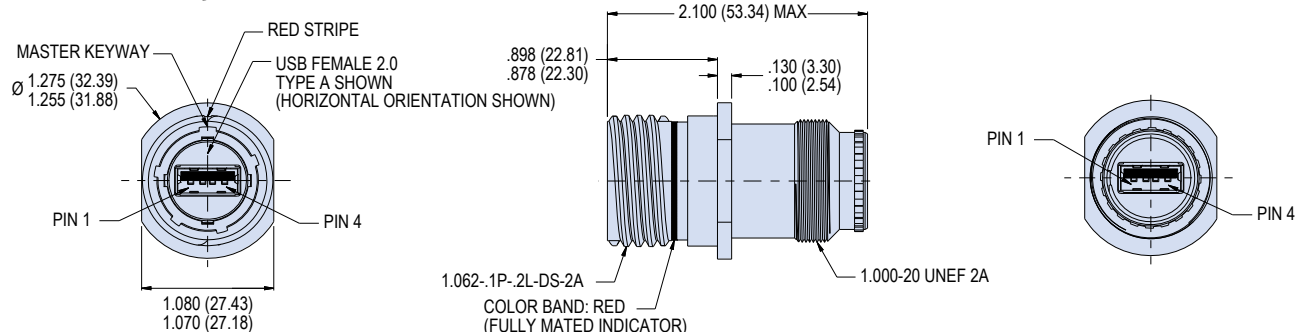
G6 - PLUG



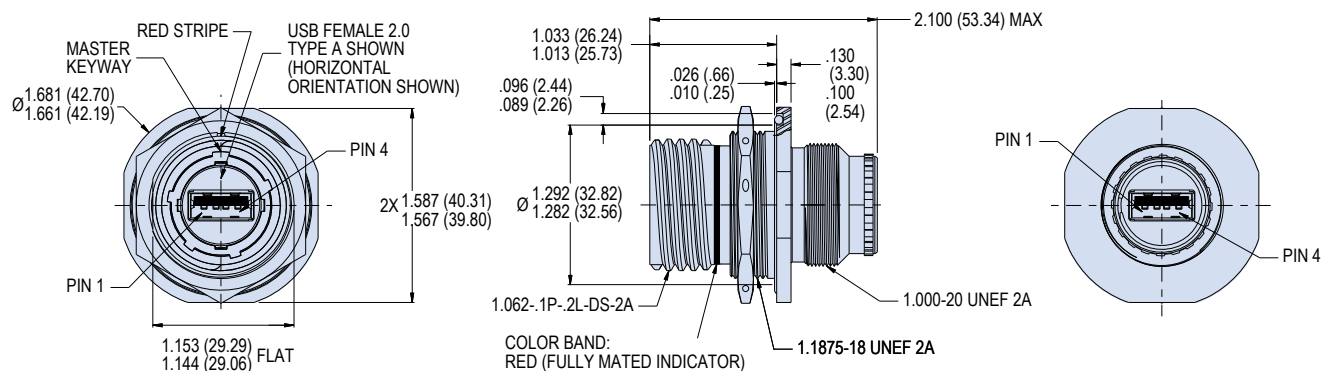
D0 - WALL MOUNT RECEPTACLE



05 - RECEPTACLE, INLINE



07 - JAM NUT MOUNT RECEPTACLE





USB 2.0 TYPE A 28840 SuperSeal™



900-345 Connector with USB Male (Plug) or Female (Receptacle) to Crimp Removable Contacts

H

How to Order									
Part Number Example	900-345	NF	D0	-15	2	A	1	H	
Basic Number	900-345								
Material/Finish	See Material and Finish Options Table								
Connector Style	D0 = Receptacle, Wall Mount 05 = Receptacle, Inline 07 = Receptacle, Jam Nut G6 = Plug								
Shell Size	15								
USB Performance	2 = USB 2.0								
USB Interface Type	A = Type A								
Alternate Polarization	1, 2, 3, 4, 5, and 6 See connector specifications page for further information (Per MIL-DTL-28840)								
USB Orientation	H = Horizontal V = Vertical								

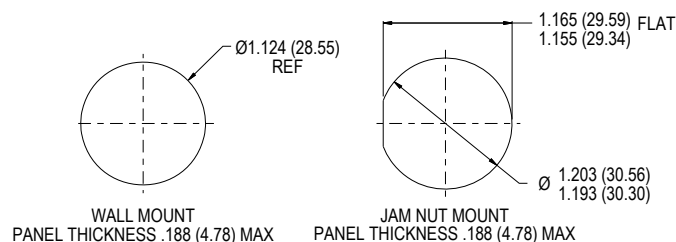
Material and Finish Options		
Code	Material	Finish Description
NF	Aluminum	Cadmium O. D. Over Electroless Nickel (500 hour Salt Spray)
ZN		Zinc Nickel, Olive Drab
MT		Nickel-PTFE, 1000 Hour Grey™
Z1	Stainless Steel	Passivate
ZU		Black Cadmium Over Nickel
AB	Marine Bronze	None (Clean Only)

USB 2.0 Wiring				
Pin	Name	Cable Color (USB)	Description	Recommended Wire Sizes (AWG)
1	(V BUS)	Red	+5 V	22
2	(D-)	White	DATA -	28
3	(D+)	Green	DATA +	28
4	(GND)	Black	GROUND	22

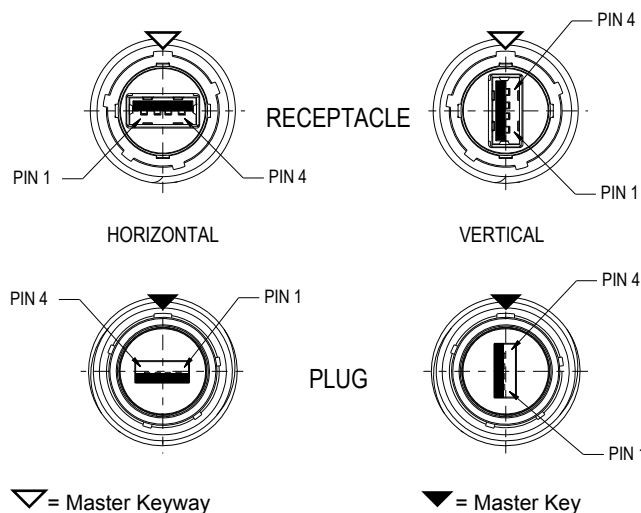
NOTES

- Connector shall meet general requirements of MIL-DTL-28840. USB connector shall be per USB 2.0 standard.
- Crimp removable contacts conform to: M39029/56-348 - size 22 socket contacts (supplied loose). Connector meets IP67 in the unmated condition
- Connector accessory features per M28840 connector designator G. Consult factory for crimp tool and accessory selection.

RECOMMENDED PANEL CUT-OUTS



USB ORIENTATION OPTIONS



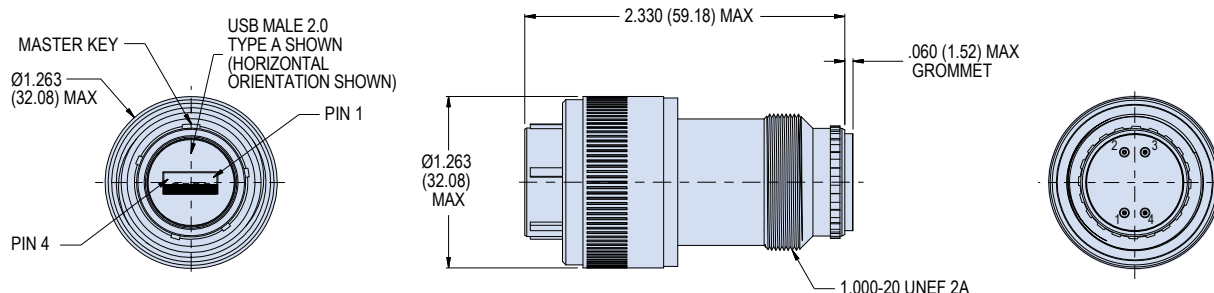


USB 2.0 TYPE A 28840 SuperSeal™

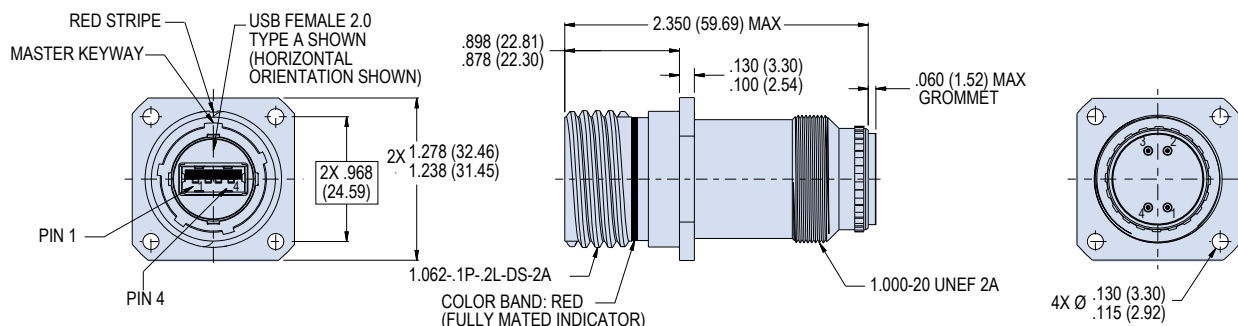


900-345 Connector with USB Male (Plug) or Female (Receptacle) to Crimp Removable Contacts

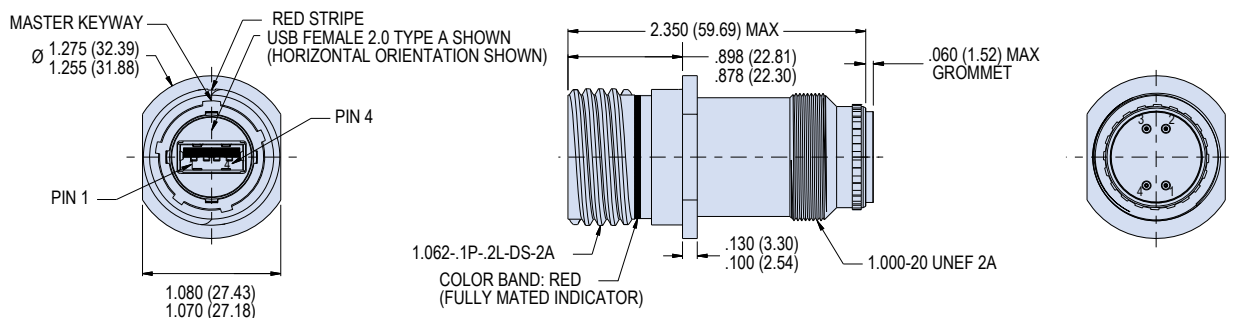
G6 - PLUG



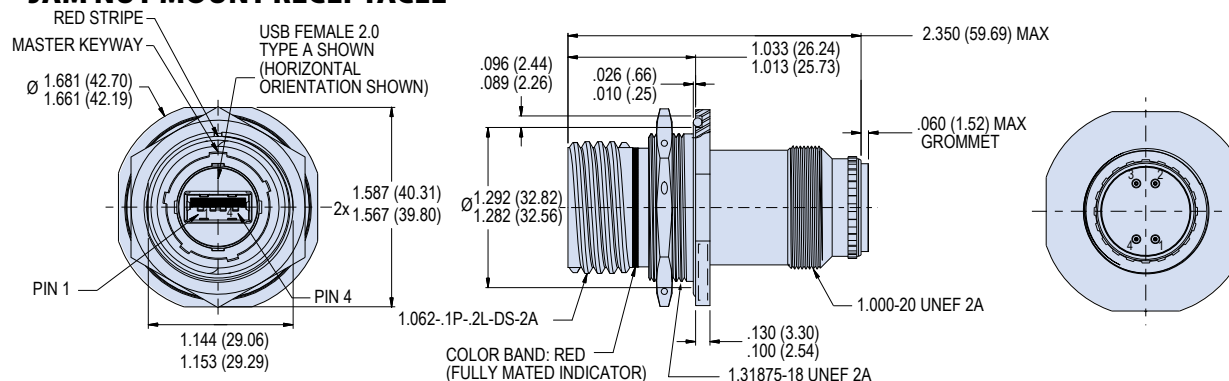
D0 - WALL MOUNT RECEPTACLE



05 - RECEPTACLE, INLINE



07 - JAM NUT MOUNT RECEPTACLE



SERIES 80
MIGHTY MOUSE
RJ45 ETHERNET

SUPERSEAL™



The harsh environment, light weight, small form factor field Ethernet connector ideally suited for land forces communications and data networking applications



Field ready ruggedized SuperSeal™ Mighty Mouse connectors with USB 2.0 inserts are available for Series 801 with double start ACME thread, Series 804 push/pull connectors, and Series 805 with triple-start ACME thread. All three Series meet IP67 requirements in the open-face condition and are in-line shielded. Mounting styles include In-line, front or rear panel mount square flange with or without clinch nuts, jam-nut and plug connectors. Connectors are offered with RJ45 CAT 5e interfaces and support current ethernet protocols. RJ45 offers separate orientation options in addition to standard Mighty Mouse® keyway position offerings to provide greater control and convenience over the connector engagement. Connectors are available with size #23 crimp contacts, solder cup termination, PC tail termination, pin/socket contacts or Quadrax contact to standard RJ45 interface. Rear accessory options include accessory thread, integrated shrink boot adapter or integrated banding platform.



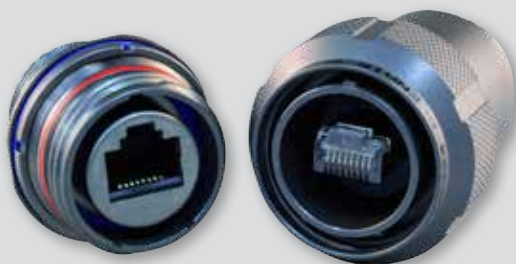
Glenair, Inc.
1211 Air Way
Glendale, CA 91201-2497
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RJ45 CAT 5E ETHERNET COMPATIBLE Series 801, 804 and 805 Mighty Mouse Product Selection Guide



Series 801 Double-Start Threaded Mighty Mouse Shell



801-300 Page K-2
SuperSeal™ Double-Start Coupler with Accessory Options and RJ45 Jack-to-Jack (Receptacle) or Plug-to-Jack (Plug).

801-301 Page K-4
SuperSeal™ Double-Start Connector with Accessory Options and RJ45 Plug (Plug) or Jack (Receptacle) to Crimp Removable Contacts.

801-302 and 801-303 Page K-6
SuperSeal™ Double-Start Receptacle with RJ45 Jack to PC Tail or Solder Cup Termination.

801-304 Page K-8
SuperSeal™ Double-Start Receptacle Adapter with Accessory Options and Pin/Socket Contacts to RJ45 Jack.

801-305 Page K-10
SuperSeal™ Double-Start Receptacle Adapter with Accessory Options and Quadrax Contacts to RJ45 Jack.

Series 804 Push/Pull Mighty Mouse Shell



804-300 Page K-12
SuperSeal™ Push/Pull Coupler with Accessory Options and RJ45 Jack-to-Jack (Receptacle) or Plug-to-Jack (Plug).

804-301 Page K-14
SuperSeal™ Push/Pull Connector with Accessory Options and RJ45 Plug (Plug) or Jack (Receptacle) to Crimp Removable Contacts.

804-302 and 804-303 Page K-16
SuperSeal™ Push/Pull Receptacle with RJ45 Jack-to-PC Tail or Solder Cup Termination.

804-305 Page K-18
SuperSeal™ Push/Pull Receptacle Adapter with Accessory Options and Quadrax Contacts to RJ45 Jack.

Series 805 Triple-Start Threaded Mighty Mouse Shell



805-300 Page K-20
SuperSeal™ Triple-Start Coupler with Accessory Options and RJ45 Jack-to-Jack (Receptacle) or Plug-to-Jack (Plug).

805-301 Page K-22
SuperSeal™ Triple-Start Connector with Accessory Options and RJ45 Plug (Plug) or Jack (Receptacle) to Crimp Removable Contacts.

805-302 Page K-24
SuperSeal™ Triple-Start Receptacle with RJ45 Jack to PC Tail Termination.

805-303 Page K-26
SuperSeal™ Triple-Start Receptacle with RJ45 Jack to Solder Cup Termination.



RJ45 CAT 5E ETHERNET COMPATIBLE Series 801, 804 and 805 Mighty Mouse



801-300 Double-Start Coupler with RJ45 Jack-to-Jack (Receptacle) or Plug-to-Jack (Plug)

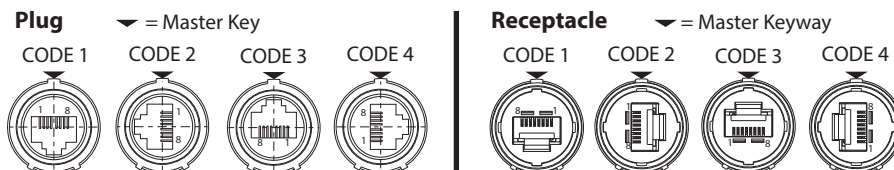
Series 801 Double Start

How To Order										
Sample Part Number	801-300	-	NF	07	G	17	5H	A	1	
Series	801-300 = plug (plug) or jack (receptacle) to jack									
Rear Accessory Option	- = Accessory Thread and Teeth S = Integral Banding Platform B = Integral Boot Adapter									
Material and Finish ¹	NF = Aluminum/Cadmium, Olive Drab M = Aluminum/Electroless Nickel MT = Aluminum/Nickel PTFE ZNU = Aluminum/Black Zinc Nickel									
Shell Style ¹	01 = In Line Receptacle 02 = Front or Rear Panel Mount Square Flange Receptacle 07 = Rear Panel Mount Jam Nut Receptacle 26 = Plug									
Grounding	- = Inline Shielded G = Inline Shielded and Grounded to Shell, Receptacle Only ²									
Shell Size	17 = Shell Size 17 19 = Shell Size 19									
RJ45 Category	5H = Cat 5E For Cat 6A applications consult factory									
Alternate Key Positions ¹	A, B, C, D, E, F									
RJ45 Orientation	1, 2, 3, 4									

NOTES

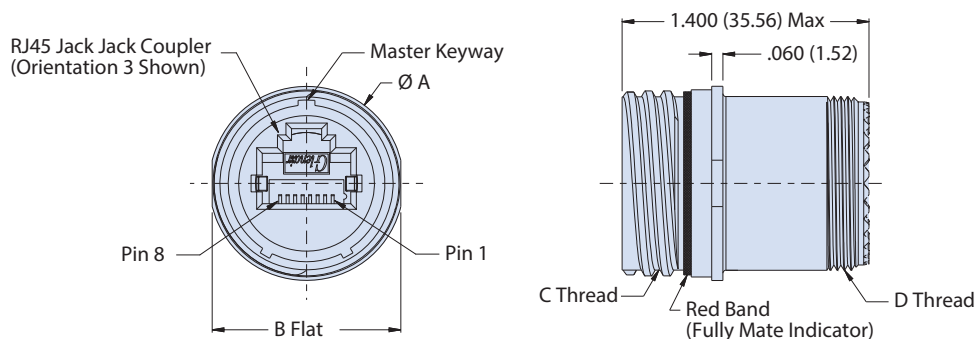
- See Section A for recommended panel cutout dimensions, additional finishes and alternate keyway positions.
- G option is inline shielded and grounded to shell, receptacle only
- Meets IP67 sealing requirement in unmated condition

RJ45 ORIENTATION OPTIONS



Receptacle Dimensions																			
Shell Size	Ø A		B Flat		C Threads	D Threads	Ø E		F SQ		G BSC		Ø J		K Flat		M Threads	Ø N	
	in	mm	in	mm			in	mm	in	mm	in	mm	in	mm	in	mm		in	mm
17	1.110	28.19	1.070	27.18	1.0625-.1P-.2L-DS-2A	.9375-20 UNEF-2A	1.700	43.18	1.280	32.51	1.060	26.92	1.325	33.66	1.290	32.77	1.1250-28 UN-2A	0.850	21.59
19	1.243	31.57	1.191	30.25	1.1875-.1P-.2L-DS-2A	1.0625-18 UNEF-2A	1.900	48.26	1.432	36.37	1.191	30.25	1.450	36.83	1.415	35.94	1.2500-28 UN-2A	1.003	25.48

SHELL STYLE 01 INLINE RECEPTACLE





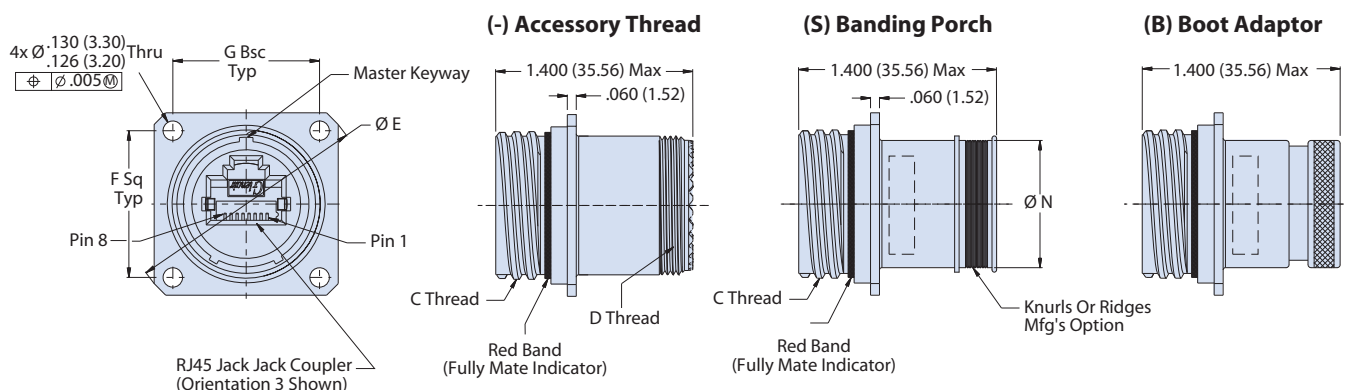
RJ45 CAT 5E ETHERNET COMPATIBLE

Series 801, 804 and 805 Mighty Mouse

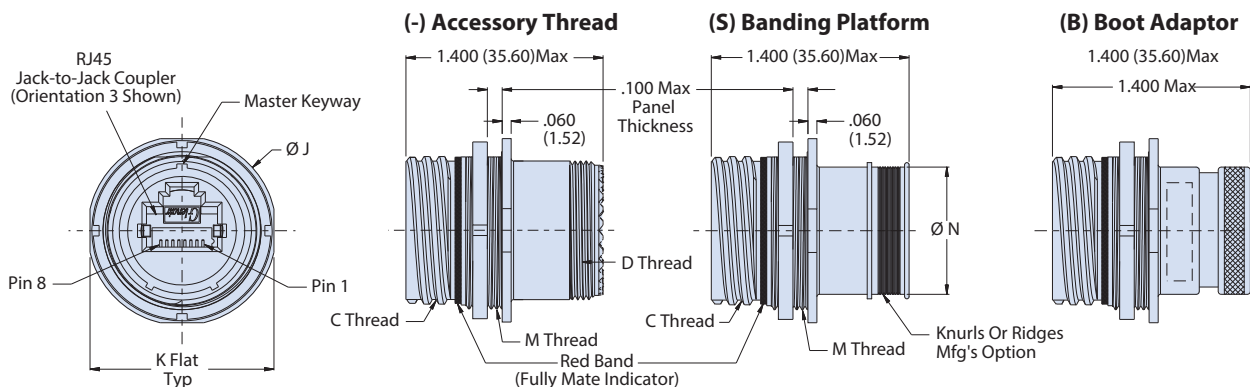


801-300 Double-Start Coupler with RJ45
Jack-to-Jack (Receptacle) or Plug-to-Jack (Plug)

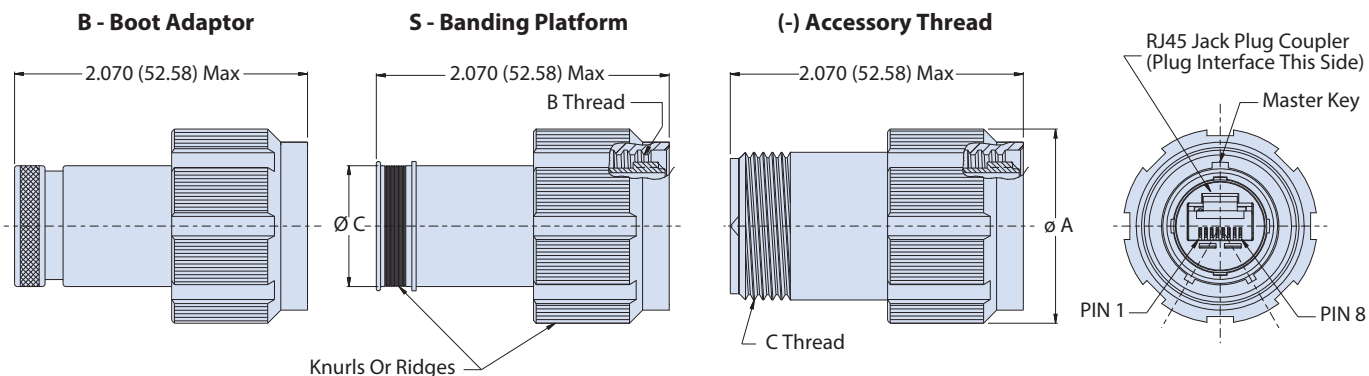
SHELL STYLE 02 FRONT OR REAR PANEL MOUNT SQUARE FLANGE RECEPTACLE



SHELL STYLE 07 REAR PANEL MOUNT JAM NUT RECEPTACLE



SHELL STYLE 26 PLUG



Plug Dimensions

Shell Size	Ø A	B Threads	C Threads
17	1.450 (36.83)	1.0625-1P-.2L-DS-2B	.9375-20 UNEF-2A
19	1.500 (38.1)	1.0625-1P-.2L-DS-2B	1.0625-18 UNEF-2A



RJ45 CAT 5E ETHERNET COMPATIBLE Series 801, 804 and 805 Mighty Mouse



801-301 Double-Start Connector with RJ45 Plug (Plug) or Jack (Receptacle) to Crimp Removable Contacts

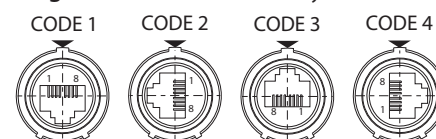
Series 801 Double Start

How To Order										
Sample Part Number	801-301	-	NF	07	G	19	5H	A	1	
Series	801-301									
Rear Accessory Option	- = Accessory Thread and Teeth B = Integral Boot Adapter S = Integral Banding Platform									
Material and Finish ¹	NF = Al/Cadmium, Olive Drab M = Al/Electroless Nickel MT = Al/Nickel PTFE ZNU = Al/Black Zinc Nickel									
Shell Style ¹	01 = In Line Receptacle 02 = Front or Rear Panel Mount Square Flange Receptacle 07 = Rear Panel Mount Jam Nut Receptacle 26 = Plug									
Grounding ²	- = Inline Shielded G = Shielded and grounded to shell									
Shell Size	17 = Shell Size 17 19 = Shell Size 19									
RJ45 Category	5H = Cat 5E For Cat 6A applications consult factory									
Alternate Key Positions ¹	A, B, C, D, E, F									
RJ45 Orientation	1, 2, 3, 4									

RJ45 ORIENTATION OPTIONS

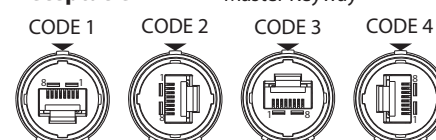
Plug

▼ = Master Key



Receptacle

▼ = Master Keyway

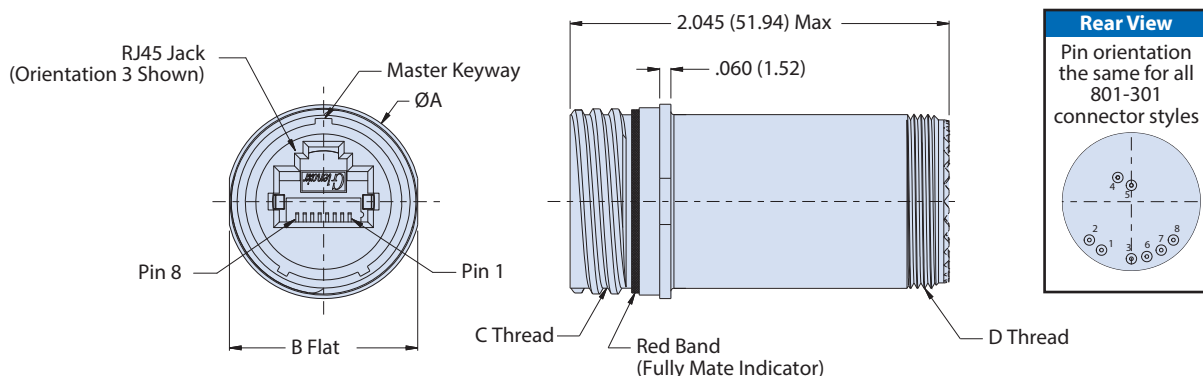


NOTES

1. See Section A for recommended panel cutout dimensions, additional finishes and alternate keyway positions.
2. G option is inline shielded and grounded to shell, receptacle only
3. Meets IP67 sealing requirement in unmated condition
4. Supplied with size 23 socket contacts (809-002 supplied loose) 1 extra contact provided

Receptacle Dimensions																			
Shell Size	Ø A		B Flat		C Threads	D Threads	Ø E		F SQ		G BSC		Ø J		K Flat		M Threads	Ø N	
	in	mm	in	mm			in	mm	in	mm	in	mm	in	mm	in	mm		in	mm
17	1.110	28.19	1.070	27.18	1.0625-.1P-.2L-DS-2A	.9375-20 UNEF-2A	1.700	43.18	1.280	32.51	1.060	26.92	1.325	33.66	1.290	32.77	1.1250-28 UN-2A	0.850	21.59
19	1.243	31.57	1.191	30.25	1.1875-.1P-.2L-DS-2A	1.0625-18 UNEF-2A	1.900	48.26	1.432	36.37	1.191	30.25	1.450	36.83	1.415	35.94	1.2500-28 UN-2A	1.003	25.48

SHELL STYLE 01 IN-LINE RECEPTACLE





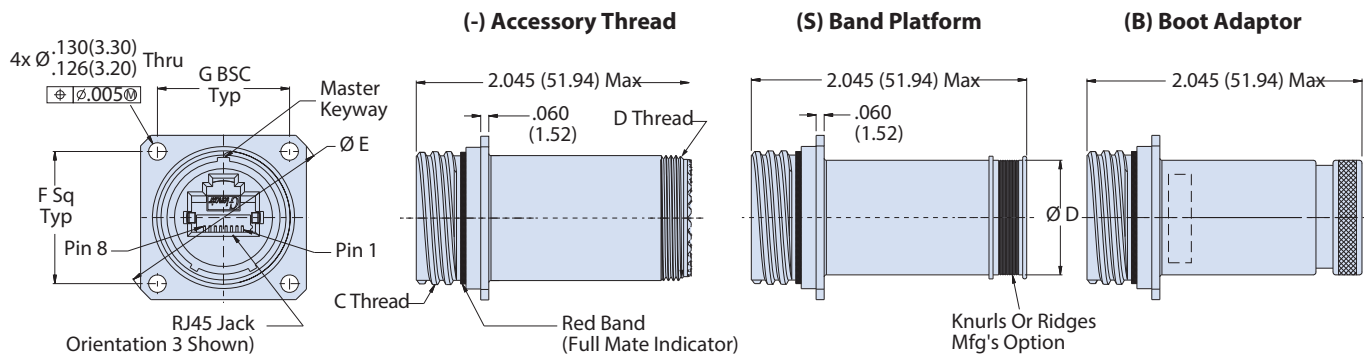
RJ45 CAT 5E ETHERNET COMPATIBLE

Series 801, 804 and 805 Mighty Mouse

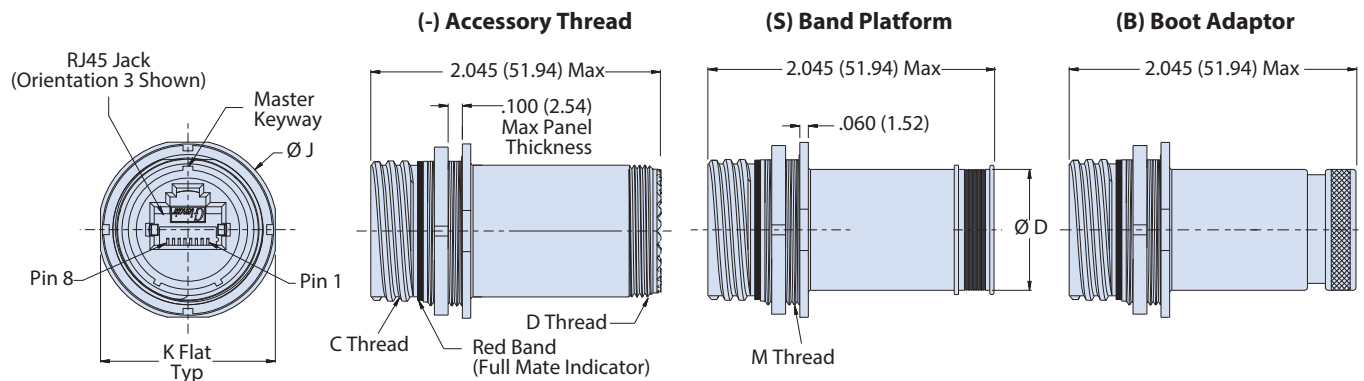


801-301 Double-Start Connector with RJ45 Plug (Plug) or Jack (Receptacle) to Crimp Removable Contacts

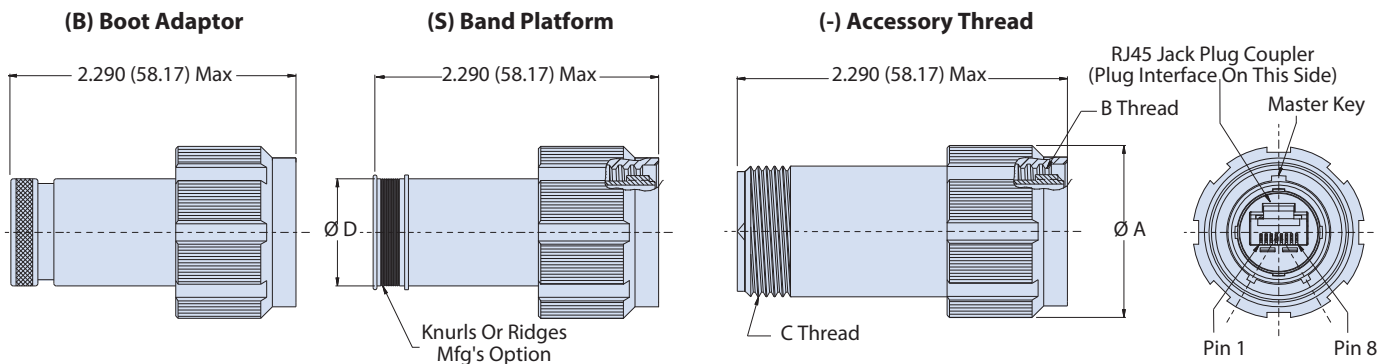
SHELL STYLE 02 FRONT OR REAR PANEL MOUNT SQUARE FLANGE RECEPTACLE



SHELL STYLE 07 REAR PANEL MOUNT JAM NUT RECEPTACLE



SHELL STYLE 26 PLUG



Plug Dimensions			
Shell Size	Ø A	B Threads	Ø C
17	1.450 (36.83)	1.0625-.1P-.2L-DS-2B	.850 (21.59)
19	1.560 (39.62)	1.1875-.1P-.2L-DS-2B	1.003 (25.48)



RJ45 CAT 5E ETHERNET COMPATIBLE Series 801, 804 and 805 Mighty Mouse



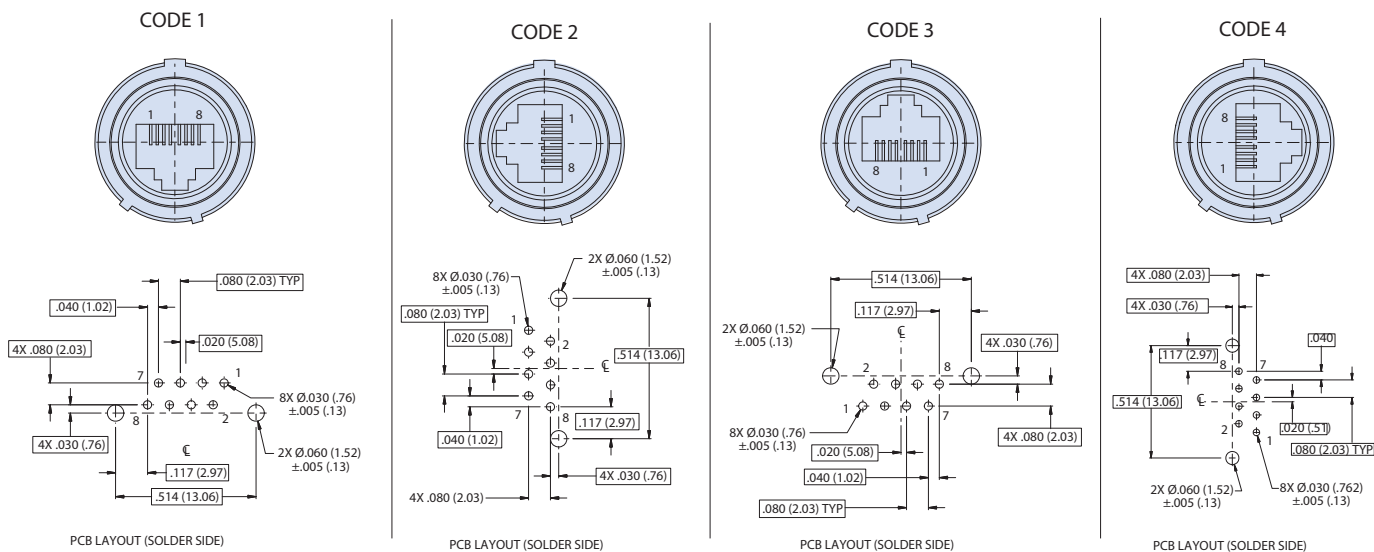
801-302 or 801-303 Double-Start Receptacle with RJ45 Jack to PC Tail or Solder Cup Termination

Series 801 Double Start

How To Order									
Sample Part Number	801-302	NF	07	-	17	5H	A	1	
Series	801-302 = PC Tail 801-303 = Solder Cup								
Material and Finish ¹	NF = Aluminum/Cadmium, Olive Drab M = Aluminum/Electroless Nickel MT = Aluminum/Nickel PTFE ZNU = Aluminum/Black Zinc Nickel								
Shell Style ¹	02 = Front or Rear, Square Flange Panel Mount Receptacle 07 = Jam Nut Receptacle, Rear Panel Mount								
Grounding	- = Inline Shielded G = Shielded and grounded to shell For improved 360° shielding performance select shell size 19								
Shell Size	17 = Shell Size 17 19 = Shell Size 19								
RJ45 Category	5H = Cat 5E For Cat 6A applications consult factory								
Alternate Key Positions ¹	A, B, C, D, E, F								
RJ45 Orientation	1, 2, 3, 4								

RJ45 ORIENTATION OPTIONS AND PCB FOOTPRINTS*

(PARTIAL VIEWS SHOWN)



*PCB footprints apply to 801-302 PC tail connectors only. Orientation codes apply to 801-302 and 801-303

Receptacle Dimensions																
Shell Size	Ø A		B Flat		C Threads	Ø E		F SQ		G BSC		Ø J		K Flat		M Threads
	in	mm	in	mm		in	mm	in	mm	in	mm	in	mm	in	mm	
17	1.110	28.19	1.070	27.18	1.0625-.1P-.2L-DS-2A	1.700	43.18	1.280	32.51	1.060	26.92	1.325	33.66	1.290	32.77	1.1250-28 UN-2A
19	1.243	31.57	1.191	30.25	1.1875-.1P-.2L-DS-2A	1.900	48.26	1.432	36.37	1.191	30.25	1.450	36.83	1.415	35.94	1.2500-28 UN-2A



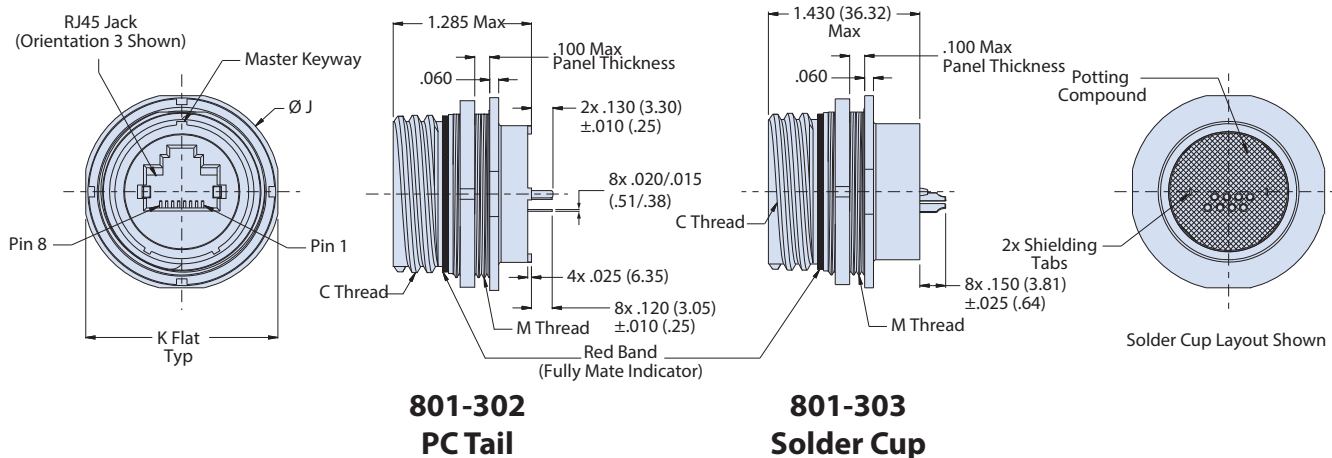
RJ45 CAT 5E ETHERNET COMPATIBLE

Series 801, 804 and 805 Mighty Mouse

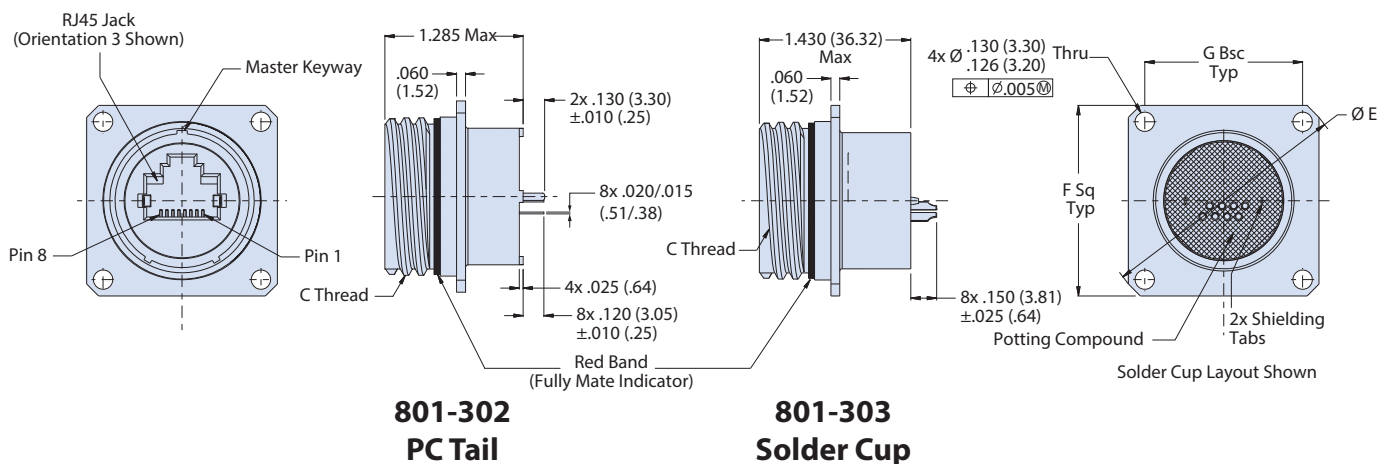


801-302 or 801-303 Double-Start Receptacle with
RJ45 Jack to PC Tail or Solder Cup Termination

SHELL STYLE 07 JAM NUT RECEPTACLE FOR 801-302 PC TAIL AND 801-303 SOLDER CUP



SHELL STYLE 02 SQUARE FLANGE RECEPTACLE FOR 801-302 PC TAIL AND 801-303 SOLDER CUP



NOTES

1. See Section A for recommended panel cutout dimensions, additional finishes and alternate keyway positions.
2. Meets IP67 sealing requirement in unmated condition
3. Material and Finish
 - Shell, jam nut: al alloy or cres
 - Seal/o-ring: fluorosilicone
 - Sealant: RTV



RJ45 CAT 5E ETHERNET COMPATIBLE Series 801, 804 and 805 Mighty Mouse

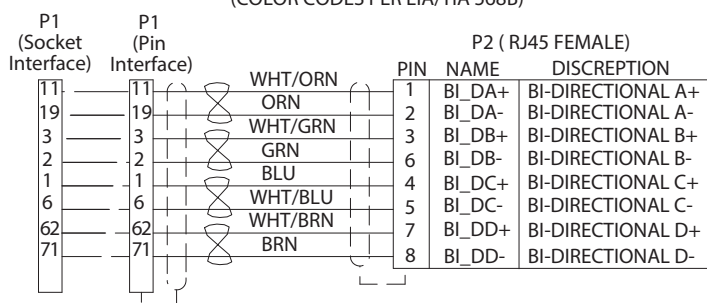


801-304 Double-Start Receptacle Adapter with Pin/Socket Contacts to RJ45 Jack

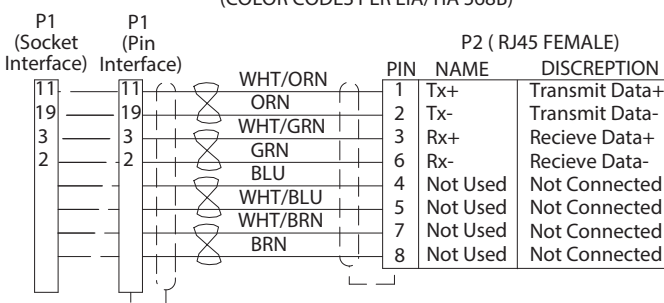
Series 801 Double Start

How To Order										
Sample Part Number	801-304	-	NF	07	17	-	85	P	5H	A
Series	801-304 = Pin/Socket to RJ45 Jack									
Rear Accessory Option	- = Accessory Thread and Teeth B = Integral Boot Adapter S = Integral Banding Platform									
Material and Finish¹	NF = Aluminum/Cadmium, Olive Drab M = Aluminum/Electroless Nickel MT = Aluminum/Nickel PTFE ZNU = Aluminum/Black Zinc Nickel									
Shell Style¹	01 = In Line Receptacle 02 = Front or Rear Panel Mount Square Flange Receptacle 07 = Rear Panel Mount Jam Nut Receptacle 26 = Plug									
Shell Size	17 = Shell Size 17 19 = Shell Size 19									
Grounding	- = Inline Shielded G = Shielded and grounded to shell For improved 360° shielding performance select shell size 19									
Insert Arrangement³	85 = 17-85 per Mighty Mouse Inserts 100 = 19-100 per Mighty Mouse Inserts									
Contact Style	P = Pin S = Socket									
RJ45 Category	5H = Cat 5E For Cat 6A applications consult factory									
Alternate Key Positions¹	A, B, C, D, E, F									

WIRING DIAGRAM FOR ETHERNET 1000base-T (Gigabit ethernet)
(COLOR CODES PER EIA/TIA 568B)



WIRING DIAGRAM FOR ETHERNET 10base-T and 100 base-TX
(COLOR CODES PER EIA/TIA 568B)



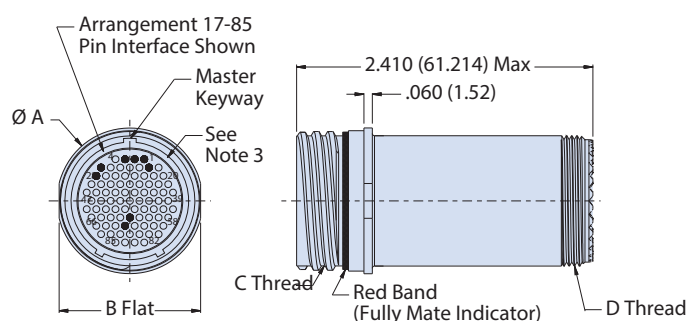
Receptacle Dimensions

Shell Size	Ø A		B Flat		C Threads	D Threads	Ø E		F SQ		G BSC		Ø J		K Flat		M Threads	Ø N	
	in	mm	in	mm			in	mm	in	mm	in	mm	in	mm	in	mm		in	mm
17	1.110	28.19	1.070	27.18	1.0625-.1P-.2L-DS-2A	.9375-20 UNEF-2A	1.700	43.18	1.280	32.51	1.060	26.92	1.325	33.66	1.290	32.77	1.1250-28 UN-2A	0.850	21.59
19	1.243	31.57	1.191	30.25	1.1875-.1P-.2L-DS-2A	1.0625-18 UNEF-2A	1.900	48.26	1.432	36.37	1.191	30.25	1.450	36.83	1.415	35.94	1.2500-28 UN-2A	1.003	25.48

NOTES

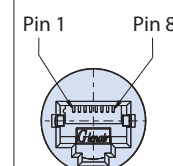
- See Section A for recommended panel cutout dimensions, additional finishes and alternate keyway positions.
- Meets IP67 sealing requirement in unmated condition.
- In accordance with Mighty Mouse insert arrangement 17-85 or 19-100 consult factory for other arrangements options.
- Material/Finishes:
 - Shell, jam nut: al alloy or cres
 - seal/o-ring: fluorosilicone

SHELL STYLE 01 IN-LINE RECEPTACLE



Rear View

Pin Position is the same for all styles



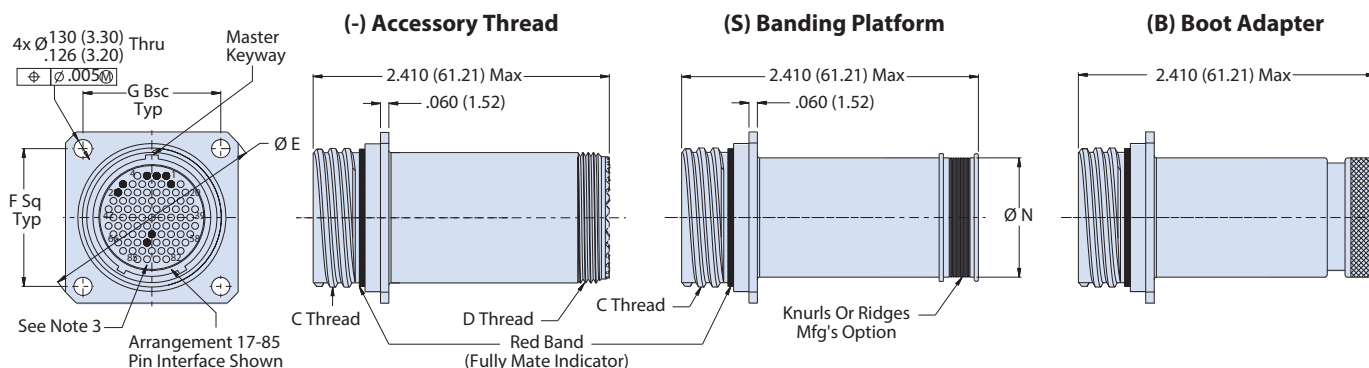


RJ45 CAT 5E ETHERNET COMPATIBLE Series 801, 804 and 805 Mighty Mouse

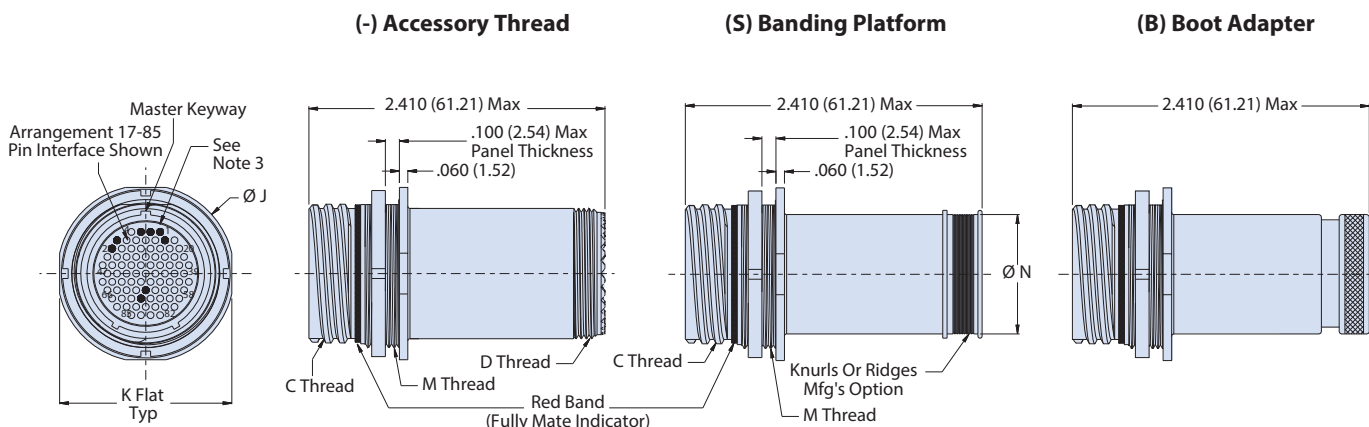


801-304 Double-Start Receptacle Adapter with Pin/Socket Contacts to RJ45 Jack

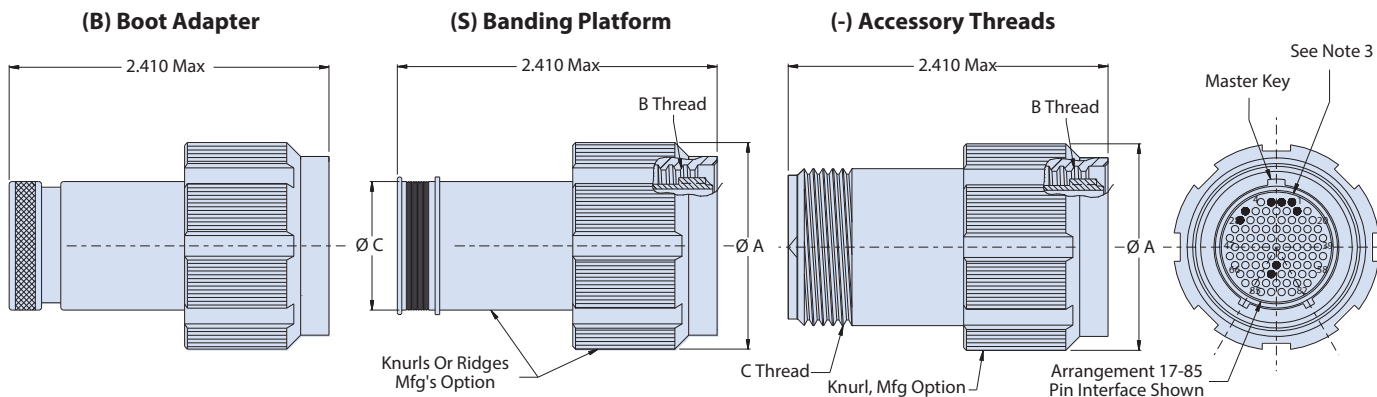
SHELL STYLE 02 FRONT OR REAR PANEL MOUNT SQUARE FLANGE RECEPTACLE



SHELL STYLE 07 REAR PANEL MOUNT JAM NUT RECEPTACLE



SHELL STYLE 26 PLUG



Plug Dimensions			
Shell Size	Ø A	B Threads	C Threads
17	1.450 (36.83)	1.0625-1P-.2L-DS-2B	.9375-20 UNEF-2A
19	1.560 (39.62)	1.1875-1P-.2L-DS-2B	1.0625-18 UNEF-2A



RJ45 CAT 5E ETHERNET COMPATIBLE Series 801, 804 and 805 Mighty Mouse



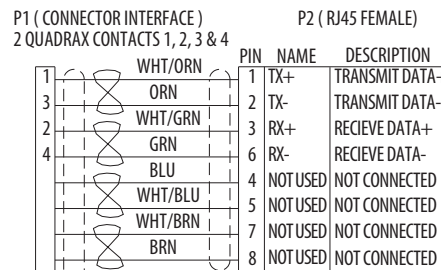
801-305 Double-Start Receptacle Adapter with Quadrap Contacts to RJ45 Jack

Series 801 Double Start

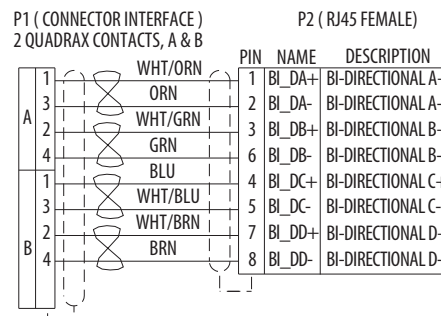
How To Order									
Sample Part Number	801-305	-	NF	07	G	17	5H	P	A
Series	801-305 Quadrap to RJ45 Jack								
Rear Accessory Option	- = Accessory Thread and Teeth B = Integral Boot Adapter S = Integral Banding Platform								
Material and Finish ¹	NF = Aluminum/Cadmium, Olive Drab M = Aluminum/Electroless Nickel MT = Aluminum/Nickel PTFE ZNU = Aluminum/Black Zinc Nickel								
Shell Style ¹	01 = In Line Receptacle 26 = Plug 02 = Front or Rear Panel Mount Square Flange Receptacle 07 = Rear Panel Mount Jam Nut Receptacle								
Grounding	- = Inline Shielded G = Shielded and grounded to shell For improved 360° shielding performance select shell size 19								
Shell Size	17 = Shell Size 17 19 = Shell Size 19								
RJ45 Category	5H = Cat 5E; For Cat 6A applications consult factory								
Contact Style ³	P = Pin S = Socket								
Alternate Key Positions ¹	A, B, C, D, E, F								

WIRING DIAGRAMS

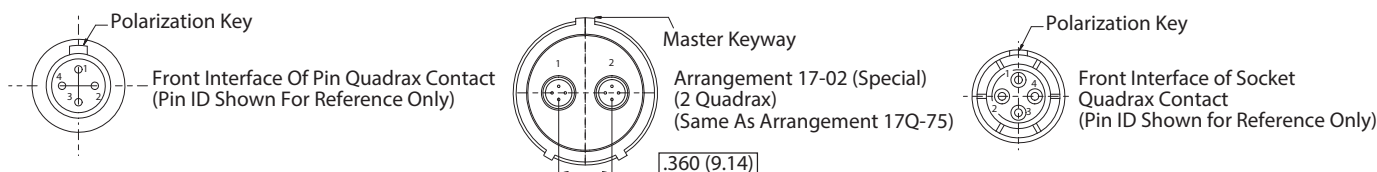
FOR ETHERNET 10base-T & 100 base-TX
(COLOR CODES PER EIA/TIA 568B)



FOR ETHERNET 1000base-T (Gigabit ethernet)
(COLOR CODES PER EIA/TIA 568B)



PARTIAL VIEW OF CONNECTOR QUADRAP INTERFACE

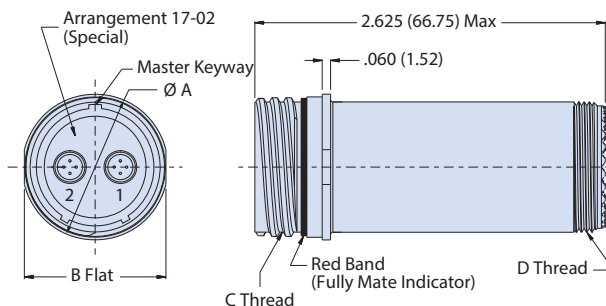


Receptacle Dimensions																			
Shell Size	Ø A		B Flat		C Threads	D Threads	Ø E		F SQ		G BSC		Ø J		K Flat		M Threads	Ø N	
	in	mm	in	mm			in	mm	in	mm	in	mm	in	mm	in	mm		in	mm
17	1.110	28.19	1.070	27.18	1.0625-.1P-.2L-DS-2A	.9375-20 UNEF-2A	1.700	43.18	1.280	32.51	1.060	26.92	1.325	33.66	1.290	32.77	1.1250-28 UN-2A	0.850	21.59
19	1.243	31.57	1.191	30.25	1.1875-.1P-.2L-DS-2A	1.0625-18 UNEF-2A	1.900	48.26	1.432	36.37	1.191	30.25	1.450	36.83	1.415	35.94	1.2500-28 UN-2A	1.003	25.48

NOTES

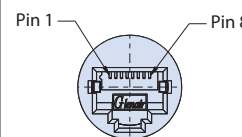
- See Section A for recommended panel cutout dimensions, additional finishes and alternate keyway positions.
- Meets IP67 sealing requirement in unmated condition.
- Pin contact shall mate with Glenair socket contact P/N 854-002-XX. Socket contact shall mate with Glenair pin contact P/N 854-001-XX. Contact factory for more information.

SHELL STYLE 01 IN-LINE RECEPTACLE



Rear View

Orientation and pin position apply to all connector styles.



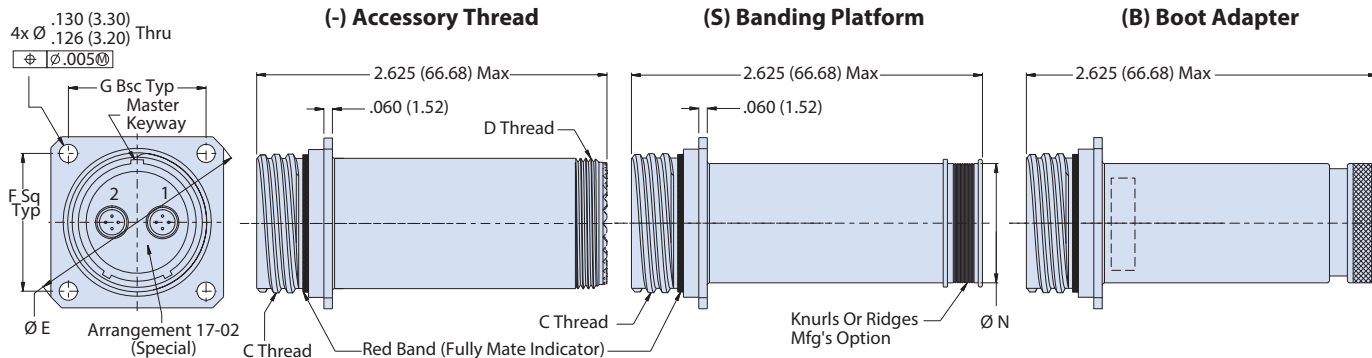


RJ45 CAT 5E ETHERNET COMPATIBLE Series 801, 804 and 805 Mighty Mouse

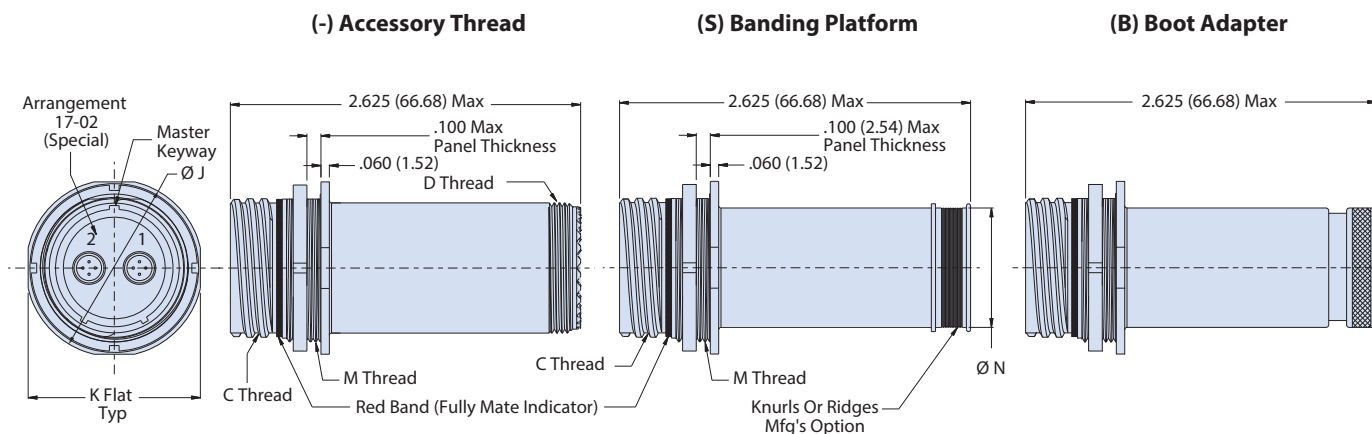


801-305 Double-Start Receptacle Adapter with Quadrx Contacts to RJ45 Jack

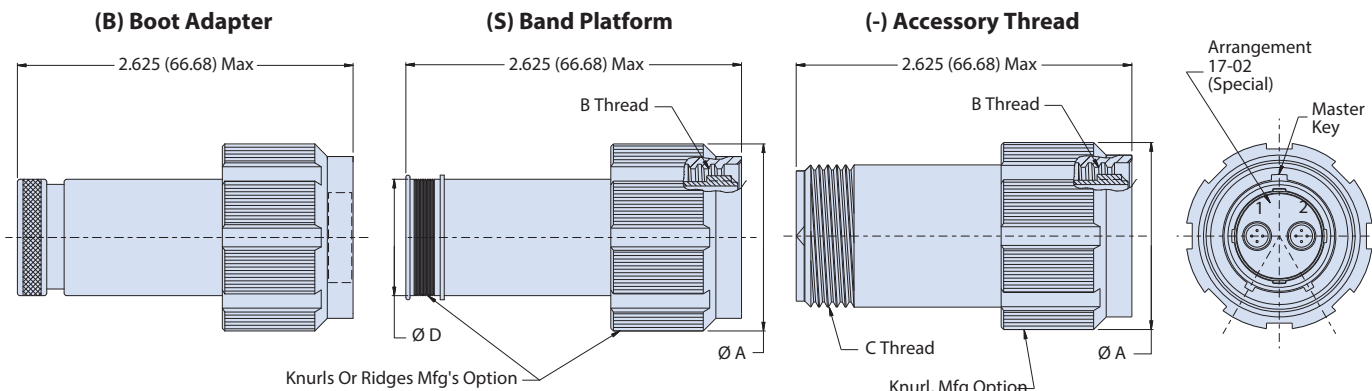
SHELL STYLE 02 FRONT OR REAR PANEL MOUNT SQUARE FLANGE RECEPTACLE



SHELL STYLE 07 REAR PANEL MOUNT JAM NUT RECEPTACLE



SHELL STYLE 26 PLUG



Plug Dimensions				
Shell Size	Ø A	B Threads	C Threads	Ø D
17	1.450 (36.83)	1.0625-1P-.2L-DS-2B	.9375-20 UNEF-2A	.850 (21.59)
19	1.560 (39.62)	1.1875-1P-.2L-DS-2B	1.0625-18 UNEF-2A	1.003 (25.48)



RJ45 CAT 5E ETHERNET COMPATIBLE Series 801, 804 and 805 Mighty Mouse



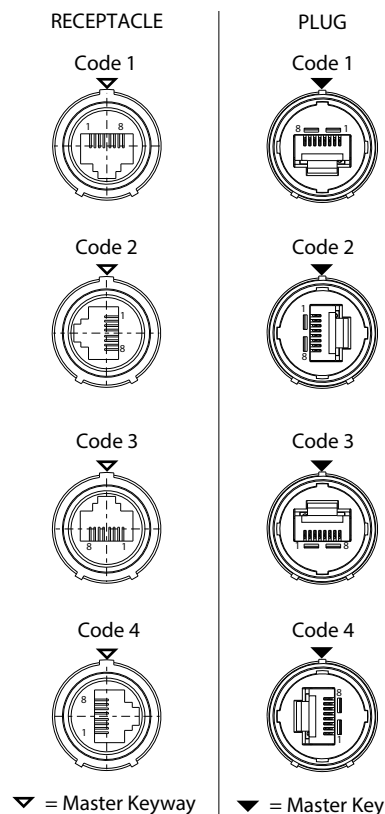
804-300 Push/Pull Coupler with RJ45 Jack-to-Jack (Receptacle) or Plug-to-Jack (Plug)

Series 804 Push/Pull

K

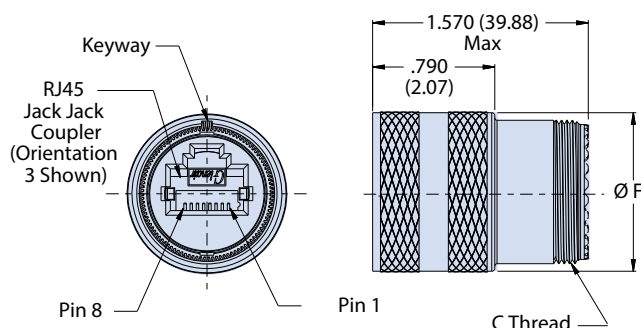
How To Order									
Sample Part Number	804-300	-	NF	07	G	16	5H	A	1
Series	804-300								
Rear Accessory Option	- = Accessory Thread and Teeth B = Integral Boot Adapter S = Integral Banding Platform								
Material and Finish ¹	NF = Al/Cadmium, Olive Drab M = Al/Electroless Nickel MT = Al/Nickel PTFE ZNU = Al/Black Zinc Nickel								
Shell Style ¹	01 = In Line Receptacle 00 = Jam Nut Receptacle, Front Panel Mount 07 = Jam Nut Receptacle, Rear Panel Mount 16 = Plug								
Grounding ⁴	- = Inline Shielded G = Shielded and grounded to shell For improved 360° shielding performance select shell size 16								
Shell Size	15 = Shell Size 15 16 = Shell Size 16								
RJ45 Category	5H = Cat 5E For Cat 6A applications consult factory								
Alternate Key Positions ¹	A, B, C, D, E, F ; Omit for single keyway (non polarized)								
RJ45 Orientation	1, 2, 3, 4								

RJ45 ORIENTATION OPTIONS



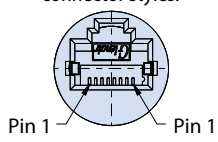
Receptacle Dimensions								
Size Shell	Mounting Style	Ø A	B Threads	C Threads	Ø D	Ø E	Ø F	K Threads
15	Front Mount	--	--	.9375-20 UNEF-2A	1.450 (35.31)	.850 (21.59)	1.060 (26.92)	1.125-28 UN-2A
	Rear Mount	1.390 (35.31)	1.0625-20 UN-2A		--			--
16	Front Mount	--	--	1.000-20 UNEF-2A	1.502 (38.15)	.902 (22.91)	1.188 (30.18)	1.1875-28 UN-2A
	Rear Mount	1.425 (36.20)	1.250-28 UN-2A		--			--

SHELL STYLE 01 IN-LINE RECEPTACLE



Rear View

Orientation and pin position apply to all connector styles.



NOTES

1. See Section A for recommended panel cutout dimensions, additional finishes and alternate keyway positions.
2. Meets IP67 sealing requirement in unmated condition
3. Receptacles are JACK-JACK and plugs are PLUG-JACK configurations
4. Size 15 uses only rear shielding sleeve. Size 16 uses front and back shielding sleeves

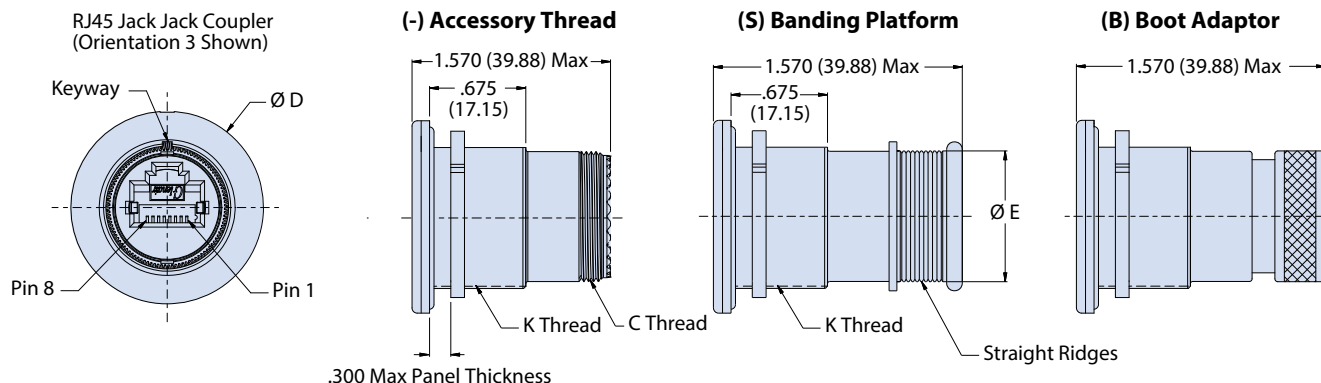


RJ45 CAT 5E ETHERNET COMPATIBLE Series 801, 804 and 805 Mighty Mouse 804-300 Push/Pull Coupler with RJ45 Jack-to-Jack (Receptacle) or Plug-to-Jack (Plug)

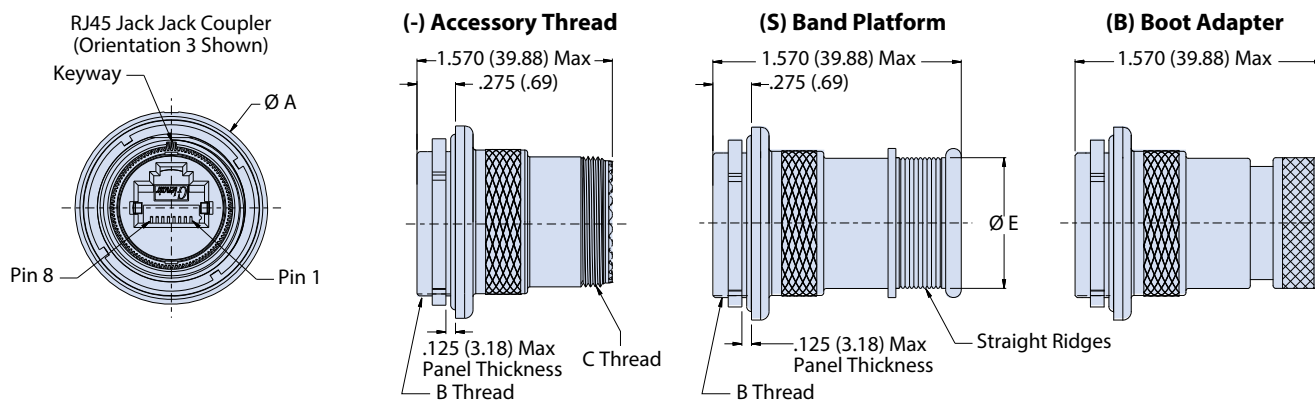


Series 804 Push/Pull

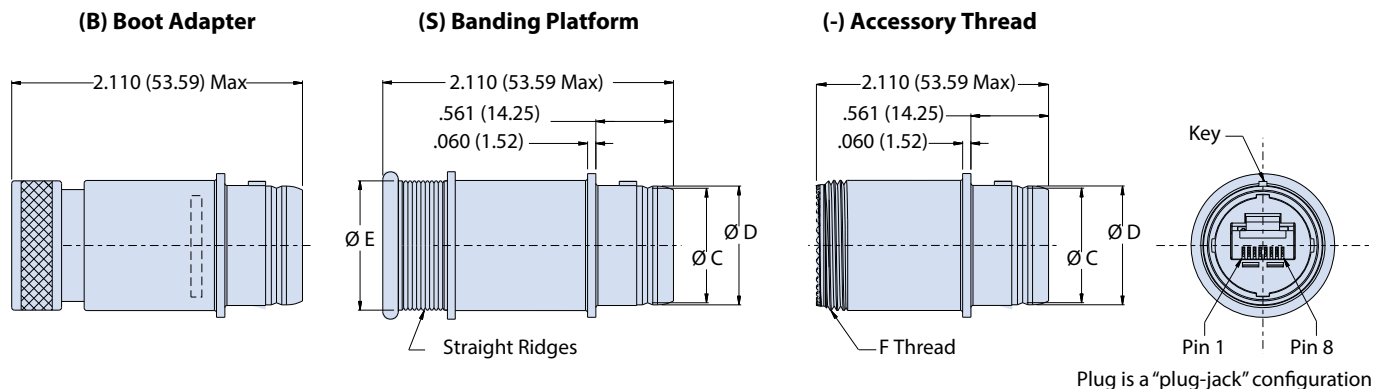
SHELL STYLE 00 FRONT PANEL MOUNT JAM NUT RECEPTACLE



SHELL STYLE 07 REAR PANEL MOUNT JAM NUT RECEPTACLE



SHELL STYLE 16 PLUG



Plug Dimensions					
Size Shell	Ø A Max	Ø C	Ø D	Ø E	F Thread
15	1.045 (26.54)	.828 (21.03)	.860 (21.84)	.850 (21.59)	.9375-20 UNEF-2A
16	1.095 (27.81)	.878 (21.30)	.910 (23.11)	.902 (22.91)	1.0000-20 UNEF-2A



RJ45 CAT 5E ETHERNET COMPATIBLE Series 801, 804 and 805 Mighty Mouse



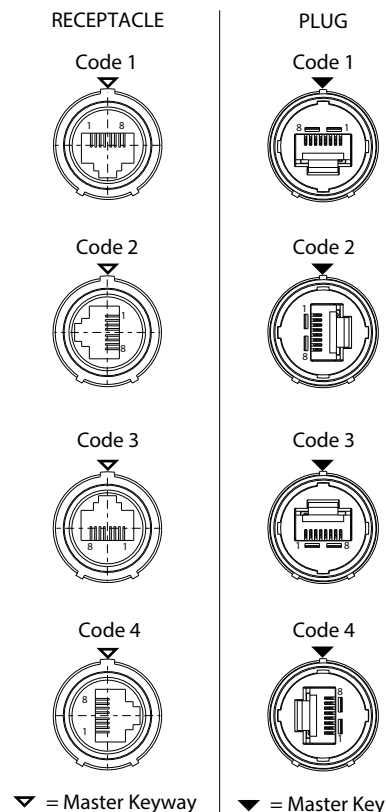
804-301 Push/Pull RJ45 Plug (Plug) or Jack (Receptacle) to Crimp Removable Contacts

Series 804 Push/Pull

K

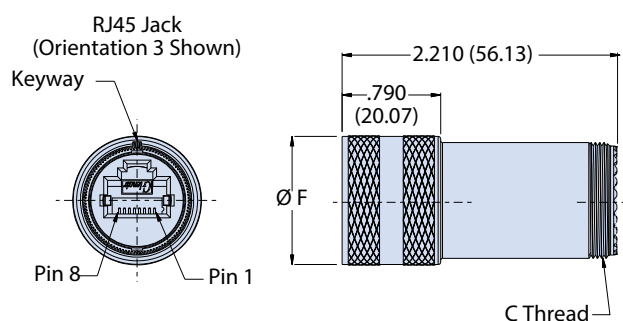
How To Order									
Sample Part Number	804-301	-	NF	07	G	16	5H	A	1
Series	804-301								
Rear Accessory Option	- = Accessory Thread and Teeth B = Integral Boot Adapter S = Integral Banding Platform								
Material and Finish ¹	NF = Al/Cadmium, Olive Drab M = Al/Electroless Nickel MT = Al/Nickel PTFE ZNU = Al/Black Zinc Nickel								
Shell Style ¹	01 = In Line Receptacle 00 = Jam Nut Receptacle, Front Panel Mount 07 = Jam Nut Receptacle, Rear Panel Mount 16 = Plug								
Grounding	- = Inline Shielded G = Shielded and grounded to shell For improved 360° shielding performance select shell size 16								
Shell Size	15 = Shell Size 15 16 = Shell Size 16								
RJ45 Category	5H = Cat 5E For Cat 6A applications consult factory								
Alternate Key Positions ¹	A, B, C, D, E, F; Omit for single keyway (non polarized)								
RJ45 Orientation	1, 2, 3, 4								

RJ45 ORIENTATION OPTIONS



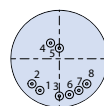
Receptacle Dimensions								
Size Shell	Mounting Style	Ø A	B Threads	C Threads	Ø D	Ø E	Ø F	K Threads
15	Front Mount	--	--	.9375-20 UNEF-2A	1.450 (35.31)	.850 (21.59)	1.060 (26.92)	1.125-28 UN-2A
	Rear Mount	1.390 (35.31)	1.0625-20 UN-2A		--			--
16	Front Mount	--	--	1.000-20 UNEF-2A	1.502 (38.15)	.902 (22.91)	1.188 (30.18)	1.1875-28 UN-2A
	Rear Mount	1.425 (36.20)	1.250-28 UN-2A		--			--

SHELL STYLE 01 IN-LINE RECEPTACLE



Rear View

Orientation and pin position apply to all connector styles.



NOTES

1. See Section A for recommended panel cutout dimensions, additional finishes and alternate keyway positions.
2. Meets IP67 sealing requirement in unmated condition
3. Supplied with size 23 crimp socket contacts (809-002 supplied loose)



RJ45 CAT 5E ETHERNET COMPATIBLE

Series 801, 804 and 805 Mighty Mouse

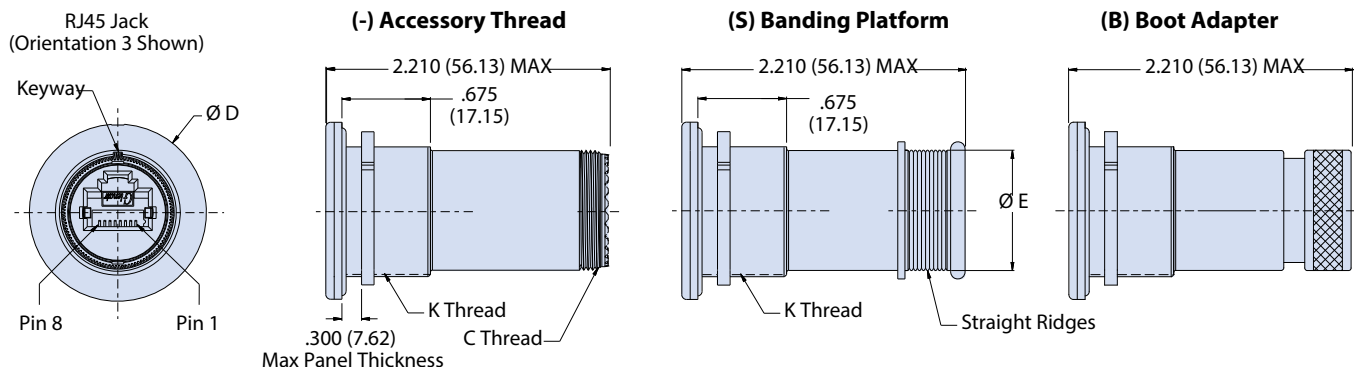


804-301 Push/Pull RJ45 Plug (Plug) or Jack
(Receptacle) to Crimp Removable Contacts

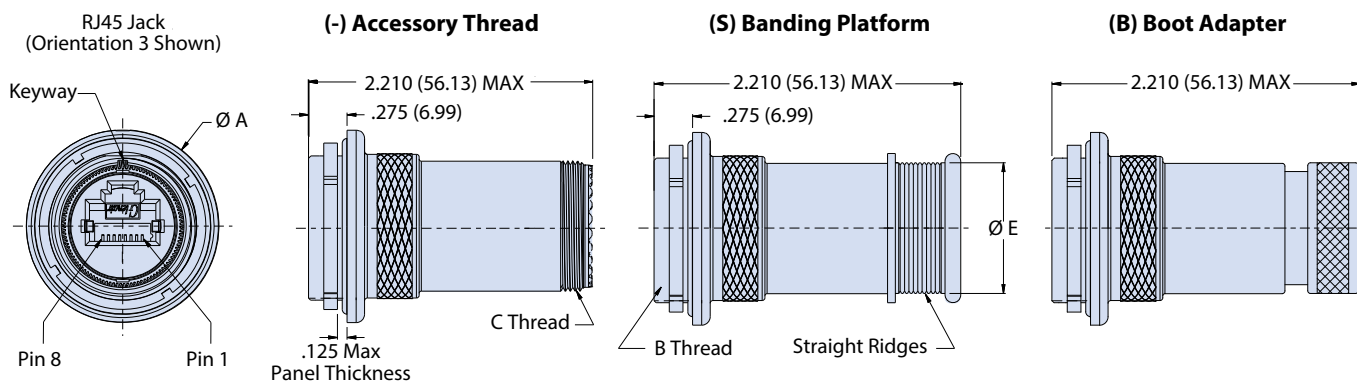
Series 804 Push/Pull

K

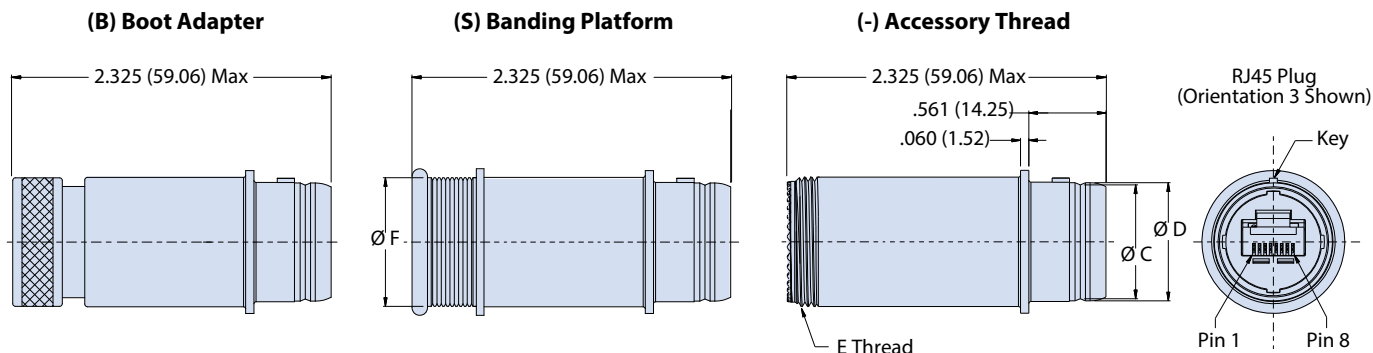
SHELL STYLE 00 FRONT PANEL MOUNT JAM NUT RECEPTACLE



SHELL STYLE 07 REAR PANEL MOUNT JAM NUT RECEPTACLE



SHELL STYLE 16 PLUG



Plug Dimensions					
Shell Size	Ø A	Ø C	Ø D	E Threads	Ø F
15	1.045 (26.54)	.828 (21.03)	.860 (21.84)	.9375-20 UNEF-2A	.850 (26.92)
16	1.095 (27.81)	.878 (22.30)	.910 (23.11)	1.0000-20 UNEF-2A	.902 (22.91)



RJ45 CAT 5E ETHERNET COMPATIBLE Series 801, 804 and 805 Mighty Mouse



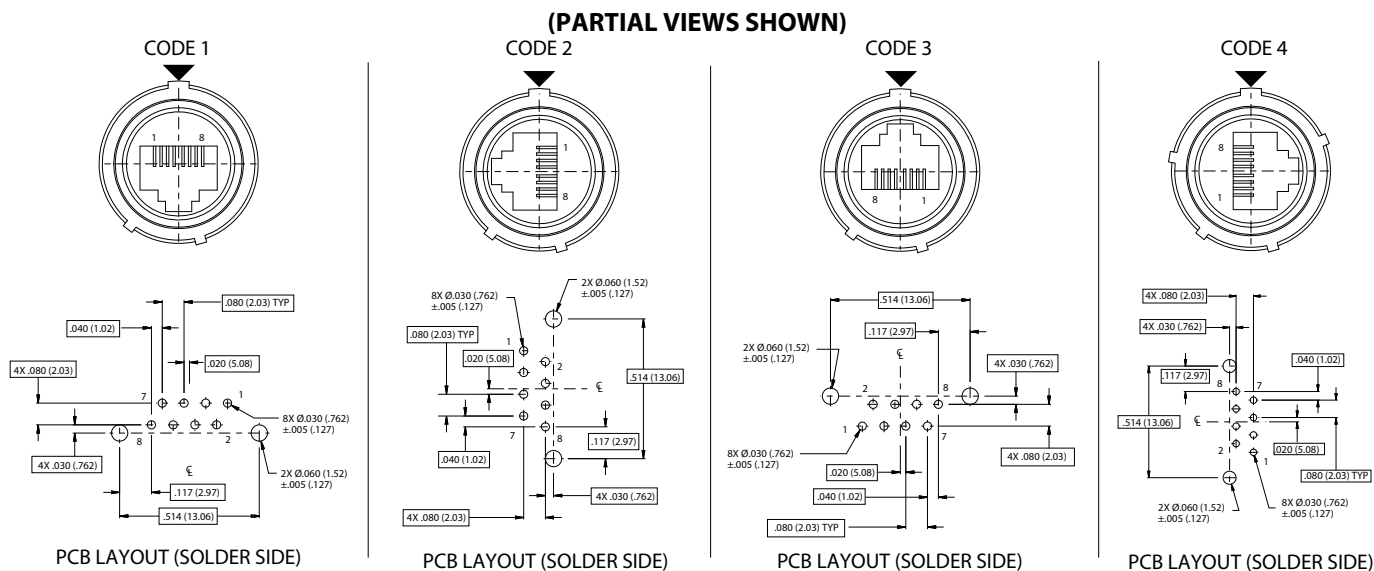
804-302 or 804-303 Push/Pull Receptacle with RJ45
Jack-to-PC Tail or Solder Cup Termination

Series 804 Push/Pull

How To Order								
Sample Part Number	804-302	NF	07	-	15	5H	A	1
Series	804-302 = PC Tail 804-303 = Solder Cup							
Material and Finish ¹	NF = Aluminum/Cadmium, Olive Drab M = Aluminum/Electroless Nickel MT = Aluminum/Nickel PTFE ZNU = Aluminum/Black Zinc Nickel							
Shell Style ¹	07 = Rear Panel Mount Jam Nut Receptacle 00 = Front Panel Mount Jam Nut Receptacle							
Shielding	- = Inline Shielded G = Shielded and grounded to shell For improved 360° shielding performance select shell size 16							
Shell Size	15 = Shell Size 15 16 = Shell Size 16							
RJ45 Category	5H = Cat 5E For Cat 6A applications consult factory							
Alternate Key Positions ¹	A, B, C, D, E, F ; Omit for single keyway (non-polarized)							
RJ45 Orientation	1, 2, 3, 4							

Receptacle Dimensions								
Shell Size	Mounting Style	Ø A		B Threads	Ø D		K Threads	C Threads
		In	mm		In	mm		
15	FRONT MOUNT	-	-	-	1.450	36.83	1.125-28 UN-2A	.9375-20 UNEF-2A
	REAR MOUNT	1.390	35.306	1.0625-20 UN-2A	-	-	-	.9375-20 UNEF-2A
16	FRONT MOUNT	-	-	-	1.502	38.1508	1.1875-28 UN-2A	1.000-20 UNEF-2A
	REAR MOUNT	1.425	36.195	1.250-28 UN-2A	-	-	-	1.000-20 UNEF-2A

RJ45 RECEPTACLE ORIENTATION OPTIONS AND PCB FOOTPRINT



▼ = Master Keyway

PCB layout applies to 804-302 only, orientations codes for 804-302 and 804-303



RJ45 CAT 5E ETHERNET COMPATIBLE

Series 801, 804 and 805 Mighty Mouse

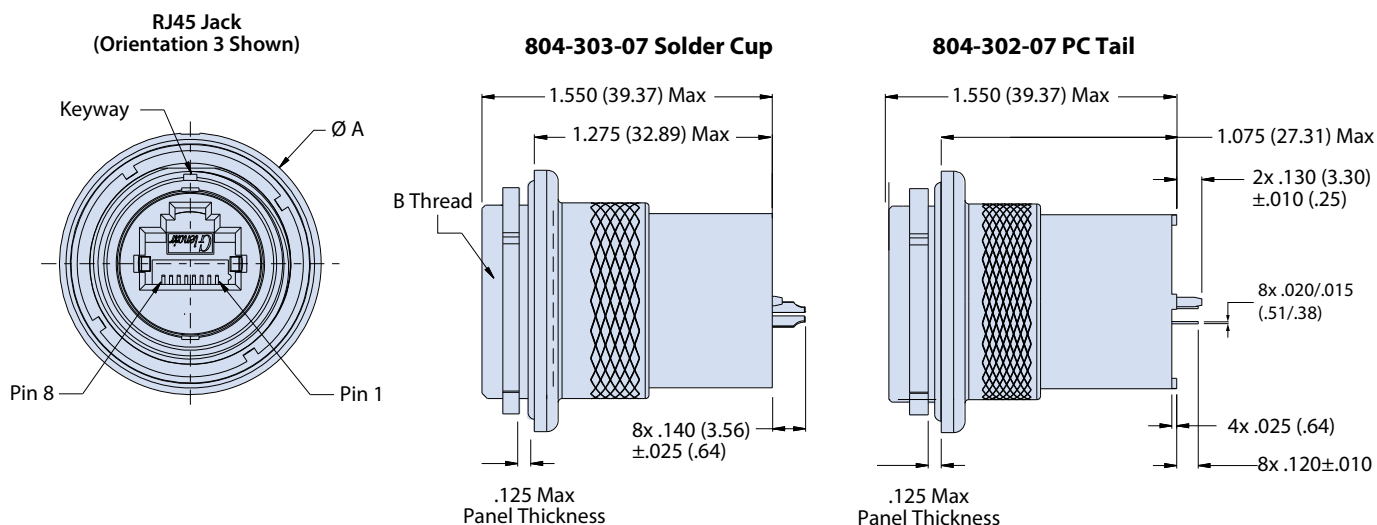


804-302 or 804-303 Push/Pull Receptacle with RJ45 Jack-to-PC Tail or Solder Cup Termination

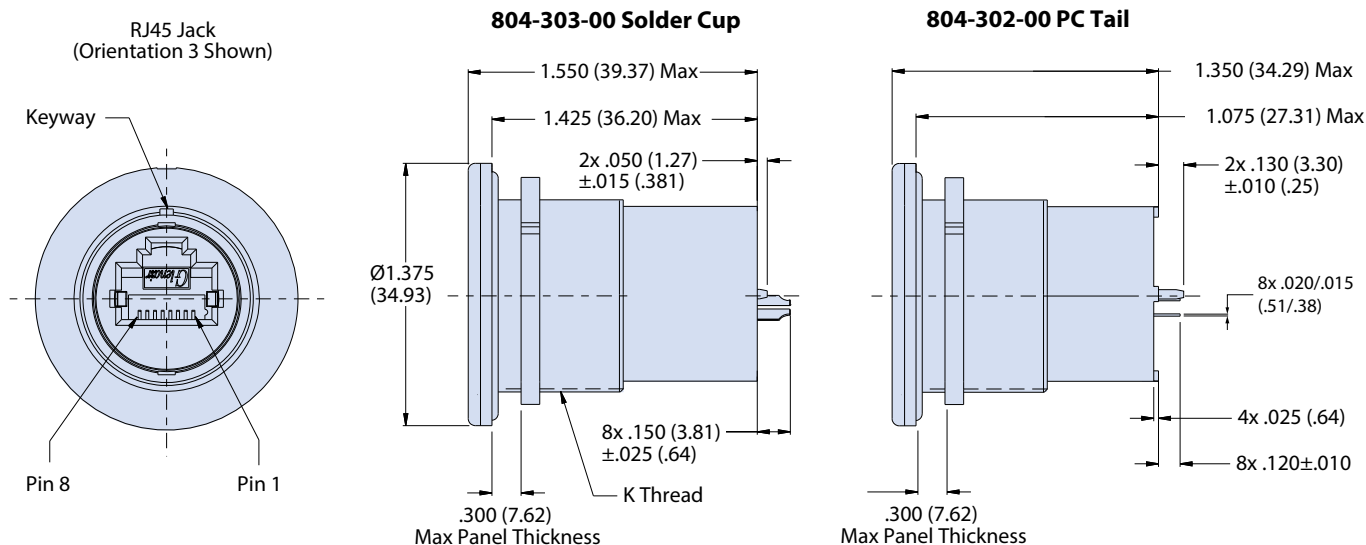
Series 804 Push/Pull

K

REAR PANEL MOUNT JAM NUT RECEPTACLE, 804-302-07 PC TAIL AND 804-303-07 SOLDER CUP

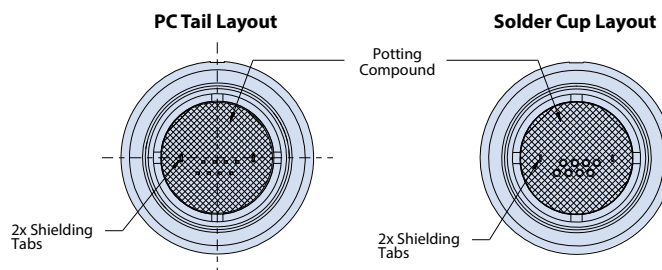


FRONT PANEL MOUNT JAM NUT RECEPTACLE, 804-302-00 PC TAIL AND 804-303-00 SOLDER CUP



NOTES

1. See Section A for recommended panel cutout dimensions, additional finishes and alternate keyway positions.
2. Meets IP67 sealing requirement in unmated condition
3. Mates with 804-300 series





RJ45 CAT 5E ETHERNET COMPATIBLE Series 801, 804 and 805 Mighty Mouse 804-305 Push/Pull Receptacle Adapter with Quadrax Contacts to RJ45 Jack

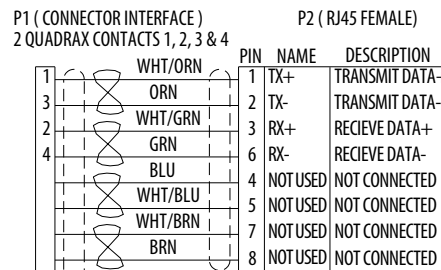


Series 804 Push/Pull

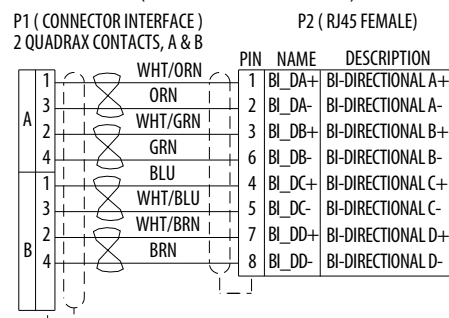
How To Order									
Sample Part Number	804-305	-	NF	07	G	16	5H	P	A
Series	804-305								
Rear Accessory Option	- = Accessory Thread B = Boot Adapter S = Banding Platform								
Material and Finish ¹	NF = Al/Cadmium, Olive Drab M = Al/Electroless Nickel MT = Al/Nickel PTFE ZNU = Al/Black Zinc Nickel								
Shell Style ¹	01 = In Line Receptacle 00 = Jam Nut Receptacle, FPM 07 = Jam Nut Receptacle, RPM 16 = Plug								
Grounding	- = Inline Shielded G = Shielded and grounded to shell For improved 360° shielding performance select shell size 16								
Shell Size	15 = Shell Size 15 16 = Shell Size 16								
RJ45 Category	5H = Cat 5E For Cat 6A applications consult factory								
Contact Style ³	P = Pin S = Socket								
RJ45 Orientation	A, B, C, D, E, F; Omit for single keyway (non polarized)								

WIRING DIAGRAMS

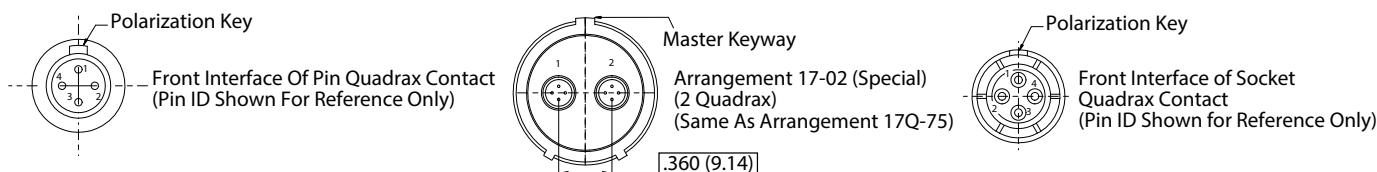
FOR ETHERNET 10base-T & 100 base-TX
(COLOR CODES PER EIA/TIA 568B)



FOR ETHERNET 1000base-T (Gigabit ethernet)
(COLOR CODES PER EIA/TIA 568B)

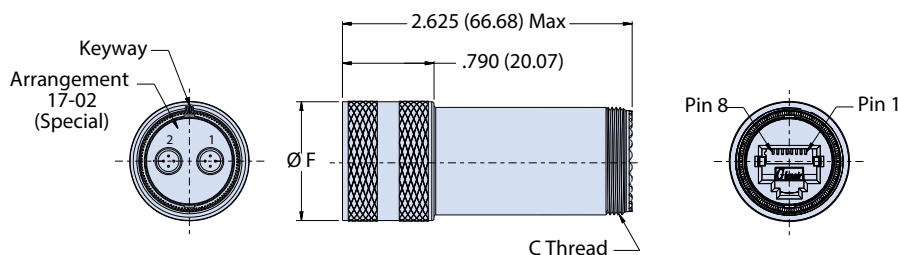


PARTIAL VIEW OF CONNECTOR QUADRAx INTERFACE



Receptacle Dimensions								
Size Shell	Mounting Style	Ø A	B Threads	C Threads	Ø D	Ø E	Ø F	K Threads
15	Front Mount	--	--	.9375-20 UNEF-2A	1.450 (35.31)	.850 (21.59)	1.060 (26.92)	1.125-28 UN-2A
	Rear Mount	1.390 (35.31)	1.0625-20 UN-2A		--			
16	Front Mount	--	--	1.000-20 UNEF-2A	1.502 (38.15)	.902 (22.91)	1.188 (30.18)	1.1875-28 UN-2A
	Rear Mount	1.425 (36.20)	1.250-28 UN-2A		--			

SHELL STYLE 01 IN-LINE RECEPTACLE



NOTES

- See Section A for recommended panel cutout dimensions, additional finishes and alternate keyway positions.
- Meets IP67 sealing requirement in unmated condition
- Pin contact mates with Glenair socket contact P/N 854-002-XX. Socket contact mates with Glenair pin contact P/N 854-001-XX

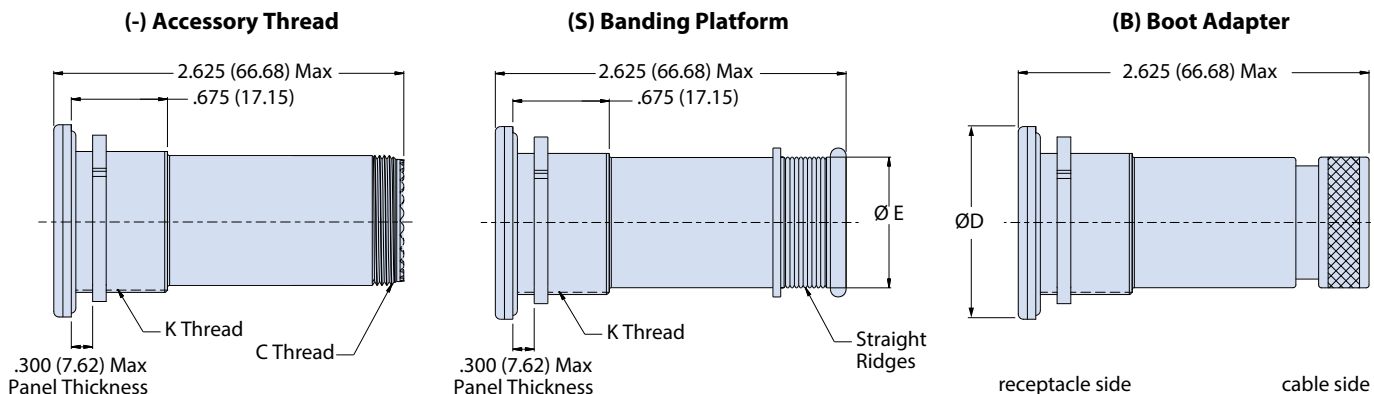


RJ45 CAT 5E ETHERNET COMPATIBLE Series 801, 804 and 805 Mighty Mouse 804-305 Push/Pull Receptacle Adapter with Quadrax Contacts to RJ45 Jack

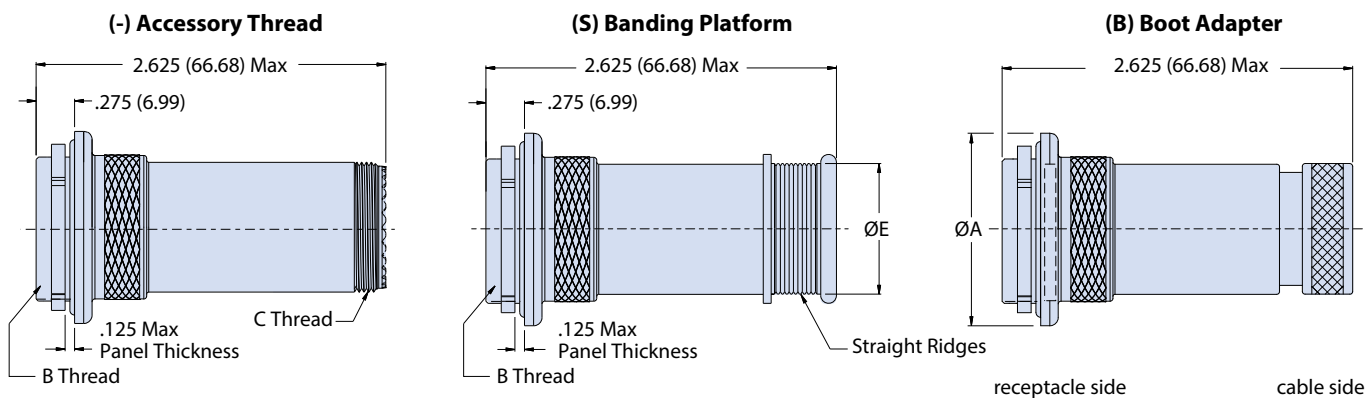


Series 804 Push/Pull

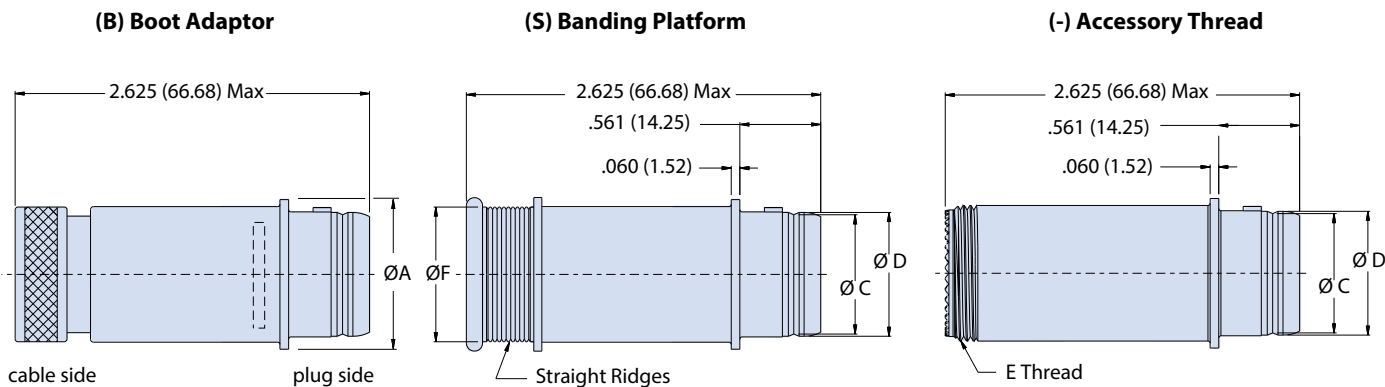
SHELL STYLE 00 FRONT PANEL MOUNT JAM NUT RECEPTACLE



SHELL STYLE 07 REAR PANEL MOUNT JAM NUT RECEPTACLE



SHELL STYLE 16 PLUG



Plug Dimensions					
Shell Size	Ø A Max	Ø C	Ø D	E Thread	Ø F
15	1.045 (26.54)	.828 (21.03)	.860 (21.84)	.9375-20 UNEF-2A	.850 (21.59)
16	1.095 (27.81)	.878 (22.30)	.910 (23.11)	1.0000-20 UNEF-2A	.902 (22.91)



RJ45 CAT 5E ETHERNET COMPATIBLE Series 801, 804 and 805 Mighty Mouse



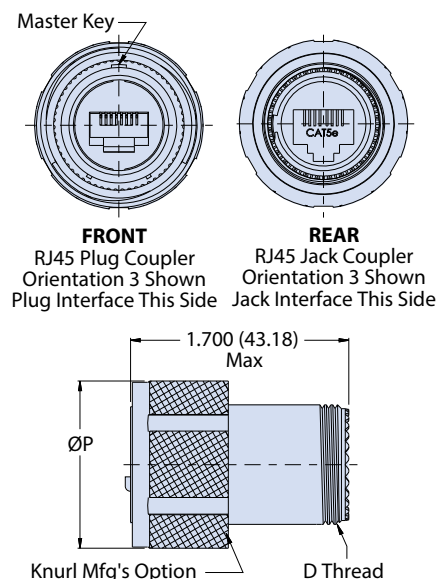
805-300 Triple-Start Coupler with RJ45 Jack-to-Jack (Receptacle) or Plug-to-Jack (Plug)

Series 805 Triple Start

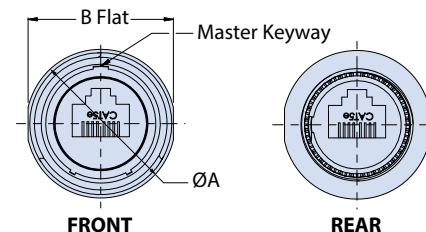
K

How To Order									
Sample Part Number	805-300	-	NF	07	G	21	5H	A	4
Series	805-300								
Rear Accessory Option	- = Accessory Thread and Teeth B = Integral Boot Adapter S = Integral Banding Platform								
Material and Finish ¹	NF = Al/Cadmium, Olive Drab M = Al/Electroless Nickel MT = Al/Nickel PTFE ZNU = Al/Black Zinc Nickel								
Shell Style ¹	01 = In Line Receptacle 02 = Front or Rear Panel Mount Square Flange Receptacle 12 = Rear Panel Mount Square Flange Receptacle with "Non-Locking" Clinch Nuts 22 = Rear Panel Mount Square Flange Receptacle with "Locking" Clinch Nuts 07 = Rear Panel Mount Jam Nut Receptacle 16 = Plug								
Grounding	G = Shielded and grounded to shell For improved 360° shielding performance select shell size 21								
Shell Size ³	19 = Shell Size 19 21 = Shell Size 21								
RJ45 Category	5H = Cat 5E For Cat 6A applications consult factory,								
Alternate Key Positions ¹	A, B, C, D, E, F ; A = Normal								
RJ45 Orientation	1, 2, 3, 4								

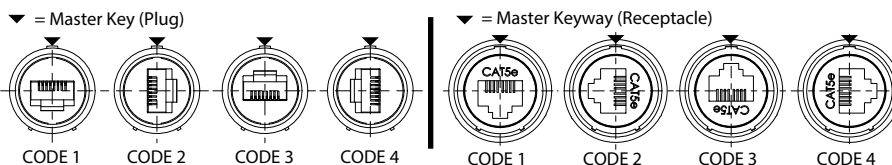
SHELL STYLE 16 PLUG



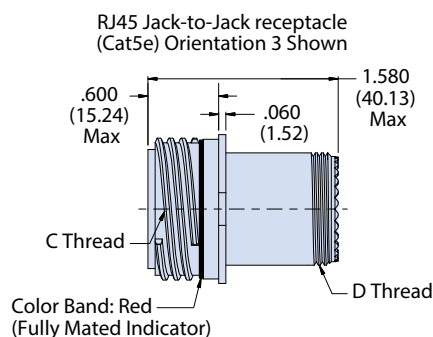
SHELL STYLE 01 IN-LINE RECEPTACLE



RJ45 JACK ORIENTATION OPTIONS



Jam Nut, Plug and Banding Platform Rear Accessory Dimensions						
Size Shell	Ø K	L	M Flat	N Thread	Ø P	Ø R
19	1.450 (36.83)	1.420 (30.07)	1.221 (31.01)	1.2500-28 UN-2A	1.311 (33.30)	.884 (22.45)
21	1.590 (40.38)	1.560 (39.62)	1.350 (34.29)	1.3750-28 UN-2A	1.448 (36.78)	1.003 (25.48)



In-Line, Square Flange and Threaded Rear Accessory Dimensions									
Size Shell	Ø A	B Flat	C Threads	D Thread	Ø E	F SQ	G BSC	Ø H	J SQ
19	1.235 (31.37)	1.205 (30.61)	1.1875-.1P-.3L-TS-2A	.9375-20 UNEF-2A	2.094 (53.19)	1.537 (39.04)	1.327 (39.04)	2.197 (55.80)	1.647 (41.83)
21	1.360 (34.54)	1.330 (33.78)	1.3125-.1P-.3L-TS-2A	1.0625-18 UNEF-2A	2.270 (57.66)	1.663 (42.24)	1.452 (36.88)	2.380 (60.45)	1.772 (45.01)

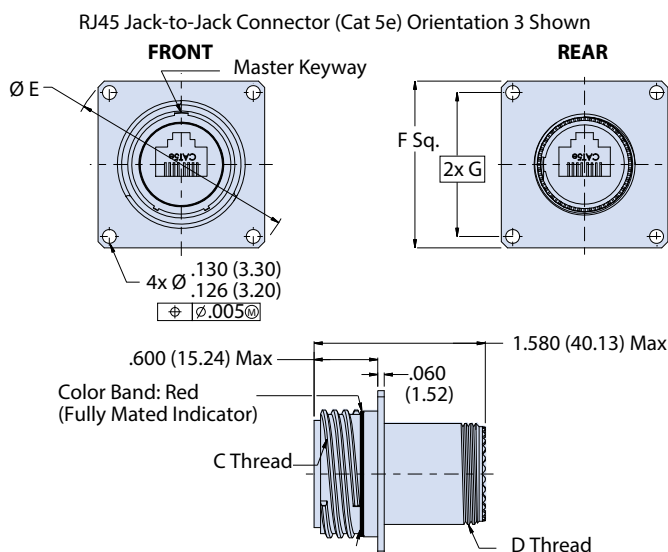


RJ45 CAT 5E ETHERNET COMPATIBLE Series 801, 804 and 805 Mighty Mouse

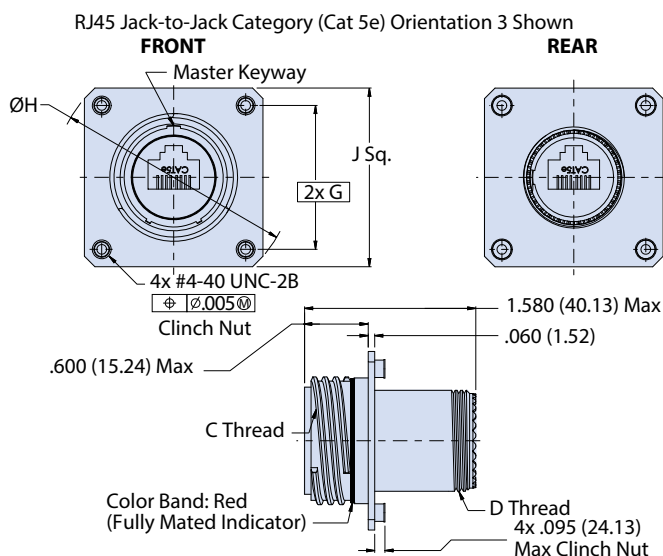


805-300 Triple-Start Coupler with RJ45 Jack-to-Jack (Receptacle) or Plug-to-Jack (Plug)

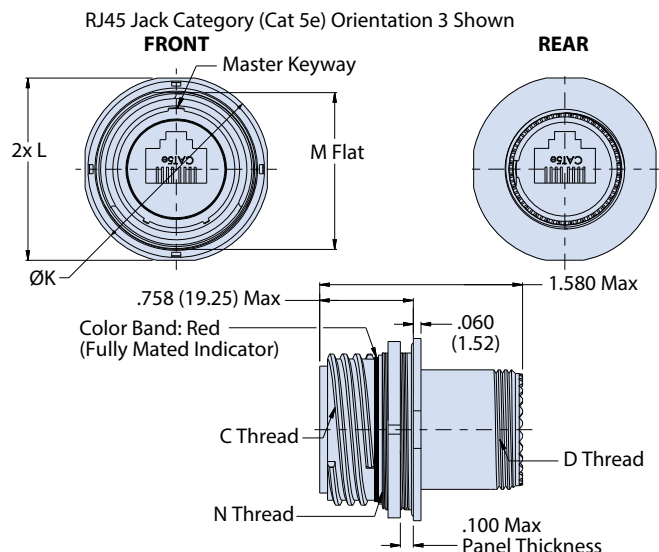
SHELL STYLE 02 FRONT OR REAR PANEL MOUNT SQUARE FLANGE RECEPTACLE



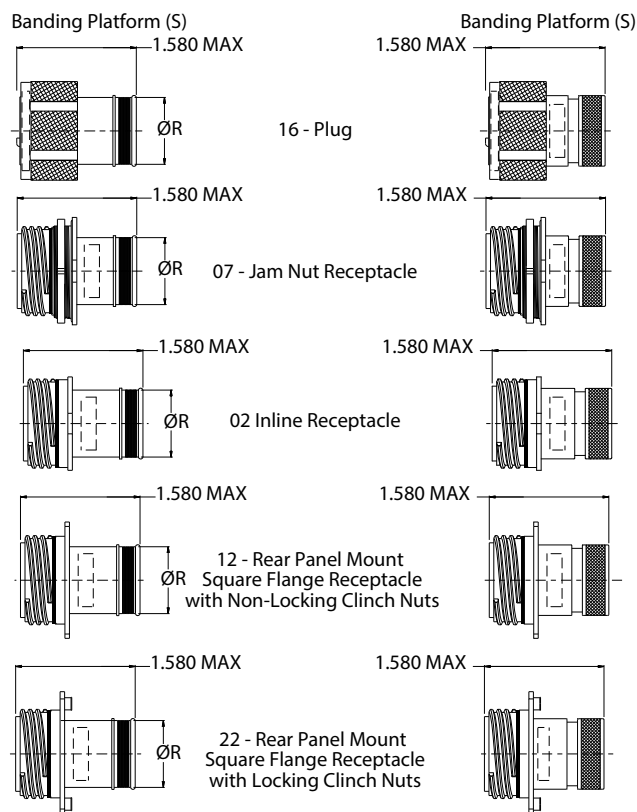
SHELL STYLE 12 & 22 FRONT OR REAR PANEL MOUNT RECEPTACLE WITH CLINCH NUTS



SHELL STYLE 07 REAR PANEL MOUNT JAM NUT RECEPTACLE



ADDITIONAL REAR ACCESSORY OPTIONS



NOTES

1. See Section A for recommended panel cutout dimensions, additional finishes and alternate keyway positions.
2. IP67 sealing in unmated condition
3. Size 19 uses only rear shield sleeve
Size 21 uses front and rear shield sleeves



RJ45 CAT 5E ETHERNET COMPATIBLE Series 801, 804 and 805 Mighty Mouse



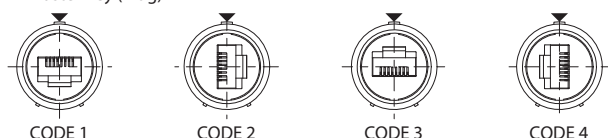
805-301 Triple-Start Connector with RJ45 Plug (Plug) or Jack (Receptacle) to Crimp Removable Contacts

Series 805 Triple Start

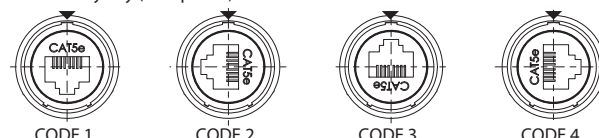
How To Order										
Sample Part Number	805-301	-	NF	01	G	21	5H	A	1	
Series	805-301 = Crimp Contacts									
Rear Accessory Option	- = Accessory Thread and Teeth B = Integral Boot Adapter S = Integral Banding Platform									
Material and Finish ¹	NF = Aluminum/Cadmium, Olive Drab M = Aluminum/Electroless Nickel MT = Aluminum/Nickel PTFE ZNU = Aluminum/Black Zinc Nickel									
Shell Style ¹	01 = In Line Receptacle 02 = Front or Rear Panel Mount Square Flange Receptacle 12 = Rear Panel Mount Square Flange Receptacle with "Non-Locking" Clinch Nuts 22 = Rear Panel Mount Square Flange Receptacle with "Locking" Clinch Nuts 07 = Rear Panel Mount Jam Nut Receptacle 16 = Plug									
Shielding/Grounding ²	- = Inline Shielded G = Inline Shielded and Grounded to Shell									
Shell Size	21 = Shell Size 21									
RJ45 Category	5H = Cat 5E For Cat 6A applications consult factory									
Alternate Key Positions ¹	A, B, C, D, E, F; A = Normal									
RJ45 Orientation Option	1, 2, 3, 4									

RJ45 JACK ORIENTATION OPTIONS

▼ = Master Key (Plug)

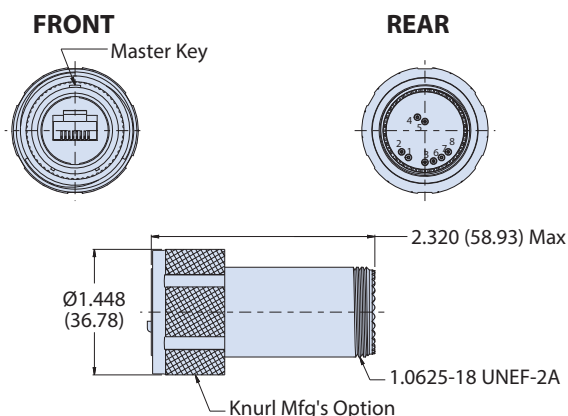


▼ = Master Keyway (Receptacle)



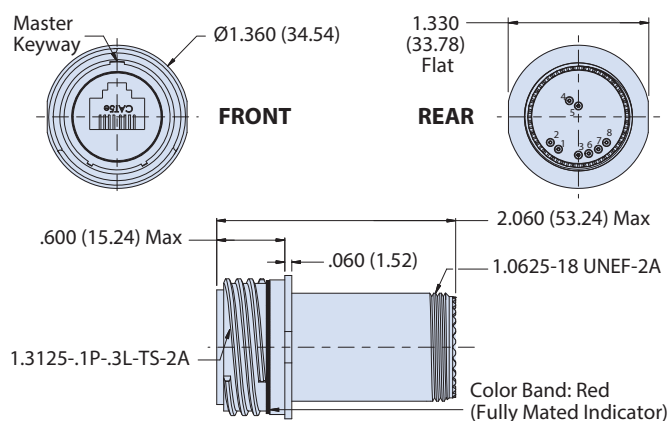
SHELL STYLE 16 PLUG

RJ45 Plug Category (CAT 5e) Orientation 3 Shown



SHELL STYLE 01 IN-LINE RECEPTACLE

RJ45 Jack Category (CAT 5e) Orientation 3 Shown



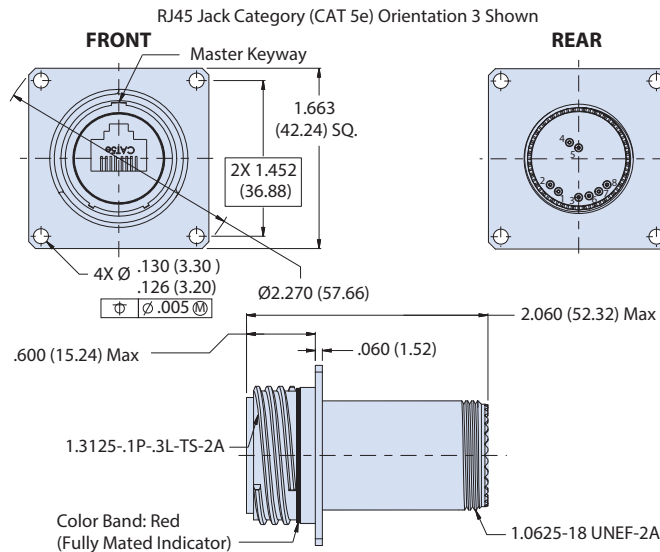


RJ45 CAT 5E ETHERNET COMPATIBLE Series 801, 804 and 805 Mighty Mouse

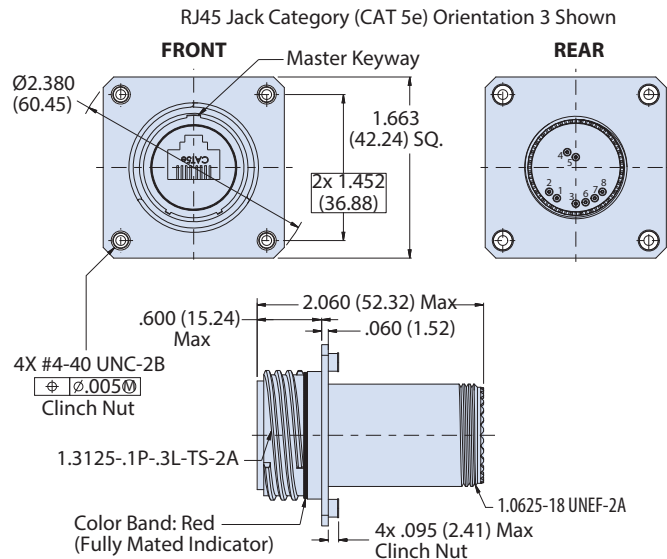


805-301 Triple-Start Connector with RJ45 Plug (Plug) or Jack (Receptacle) to Crimp Removable Contacts

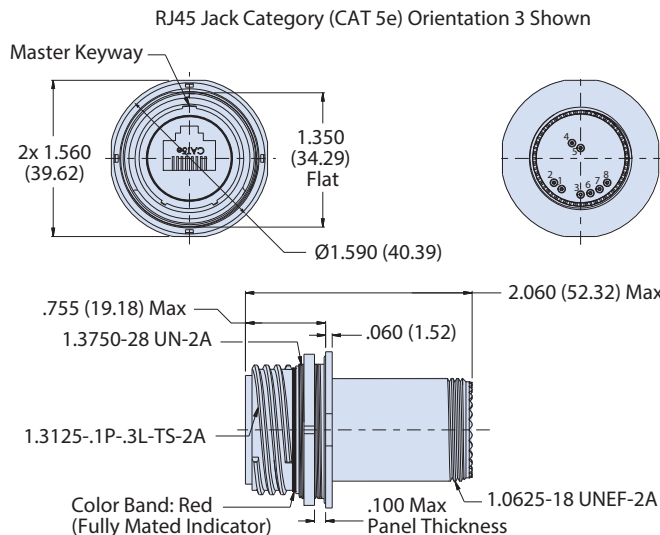
SHELL STYLE 02 FRONT OR REAR PANEL MOUNT RECEPTACLE



SHELL STYLE 12 & 22 REAR PANEL MOUNT RECEPTACLE WITH CLINCH NUTS



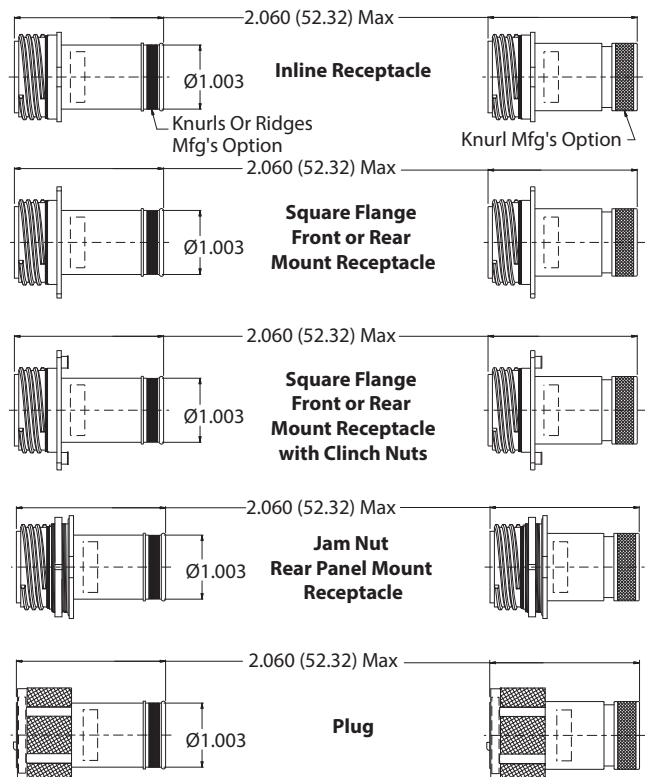
SHELL STYLE 07 REAR PANEL MOUNT JAM NUT RECEPTACLE



REAR ACCESSORY OPTIONS

S - Integrated Banding Platform

B - Integrated Boot Adaptor



NOTES

1. See Section A for recommended panel cutout dimensions, additional finishes and alternate keyway positions.
2. G option is inline shielded and grounded to shell, receptacle only
3. Meets IP67 sealing requirement in unmated condition
4. Supplied with size 23 crimp pin contacts (809-001 supplied loose)

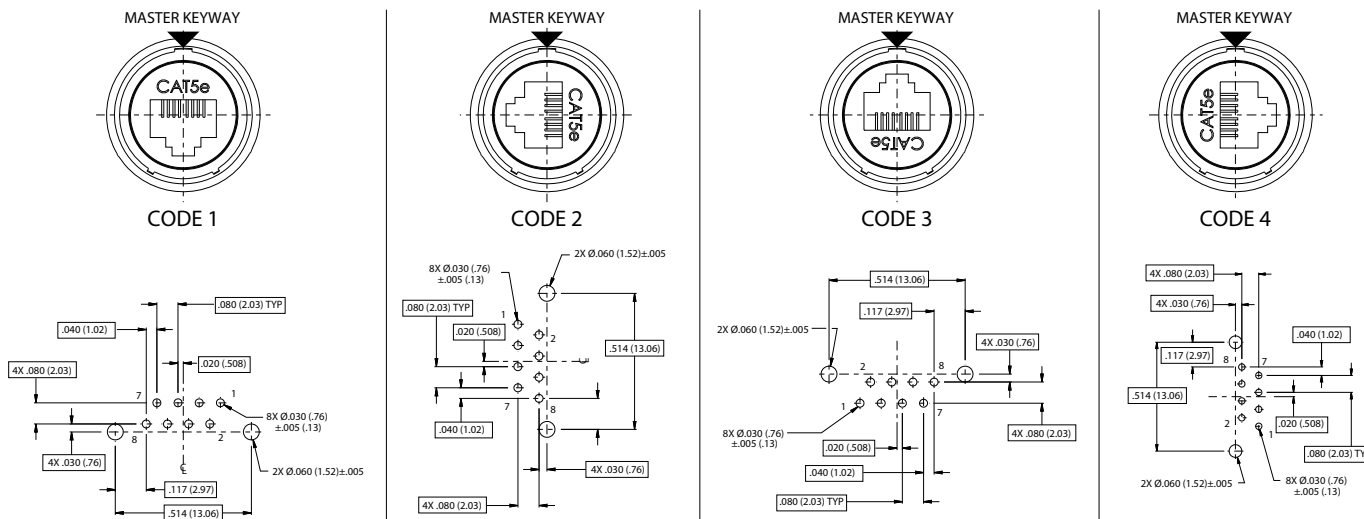


RJ45 CAT 5E ETHERNET COMPATIBLE Series 801, 804 and 805 Mighty Mouse 805-302 Triple-Start Receptacle with RJ45 Jack to PC Tail Termination



How To Order								
Sample Part Number	805-302	NF	07	G	19	5H	A	1
Series	805-302 = PC Tail							
Material and Finish ¹	NF = Aluminum/Cadmium, Olive Drab M = Aluminum/Electroless Nickel MT = Aluminum/Nickel PTFE ZNU = Aluminum/Black Zinc Nickel							
Shell Style ¹	02 = Front or Rear Panel Mount Square Flange Receptacle 12 = Rear Panel Mount Square Flange Receptacle with "Non-Locking" Clinch Nuts 22 = Rear Panel Mount Square Flange Receptacle with "Locking" Clinch Nuts 07 = Rear Panel Mount Jam Nut Receptacle							
Grounding	G = Shielded and grounded to shell For improved 360° shielding performance select shell size 21							
Shell Size	19 = Shell Size 19 21 = Shell Size 21							
RJ45 Category	5H = Cat 5E For Cat 6A applications consult factory							
Alternate Key Positions ¹	A, B, C, D, E, F ; A = Normal							
RJ45 Orientation Option	1, 2, 3, 4							

RJ45 RECEPTACLE ORIENTATION OPTIONS AND PCB FOOTPRINT (PARTIAL VIEWS SHOWN)



PCB Layout (Solder Side Shown)

Square Flange Mount Dimensions									
Shell Size	Ø A	B Flat	C Thread	Ø D	Ø E	F SQ	G BSC	Ø H	J SQ
19	1.235 (31.69)	1.205 (30.61)	1.1875-1P-3L-TS-2A	0.912 (23.16)	2.094 (53.19)	1.537 (39.04)	1.327 (33.71)	2.197 (55.80)	1.647 (41.83)
21	1.360 (34.54)	1.330 (33.78)	1.3125-1P-3L-TS-2A	1.017 (25.83)	2.270 (57.66)	1.663 (42.24)	1.452 (36.88)	2.380 (60.45)	1.772 (45.01)

Jam Nut and Plug Dimensions				
Shell Size	Ø K	L	M Flat	N Thread
19	1.450 (36.83)	1.420 (36.07)	1.221 (31.01)	1.2500-28 UN-2A
21	1.590 (40.39)	1.560 (39.62)	1.350 (34.29)	1.3750-28 UN-2A

NOTES

1. See Section A for recommended panel cutout dimensions, additional finishes and alternate keyway positions
2. Meets IP67 sealing requirement in unmated condition

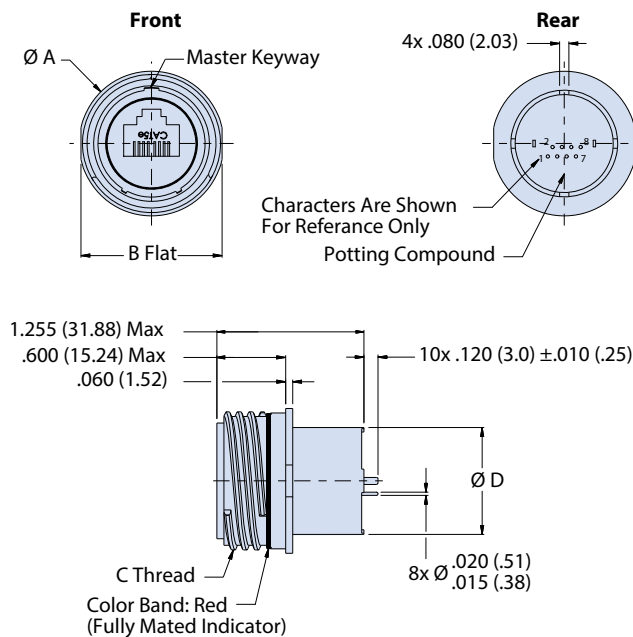


RJ45 CAT 5E ETHERNET COMPATIBLE Series 801, 804 and 805 Mighty Mouse 805-302 Triple-Start Receptacle with RJ45 Jack to PC Tail Termination



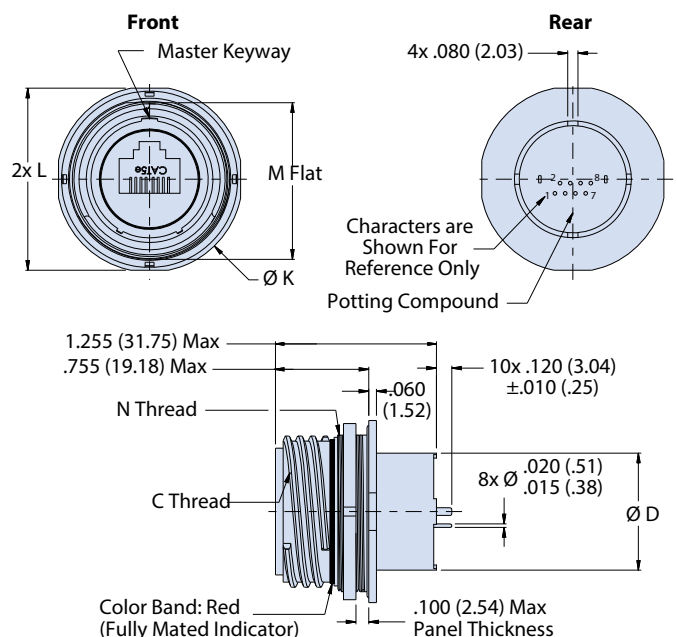
SHELL STYLE 01 INLINE

RJ45 Jack Category (Cat 5e) Orientation 3 Shown



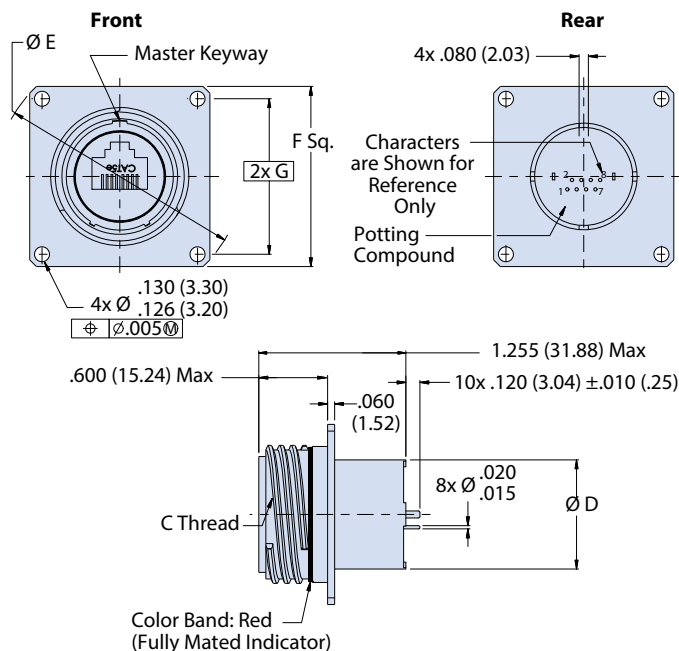
SHELL STYLE 07 JAM NUT

RJ45 Jack Category (Cat 5e) Orientation 3 Shown



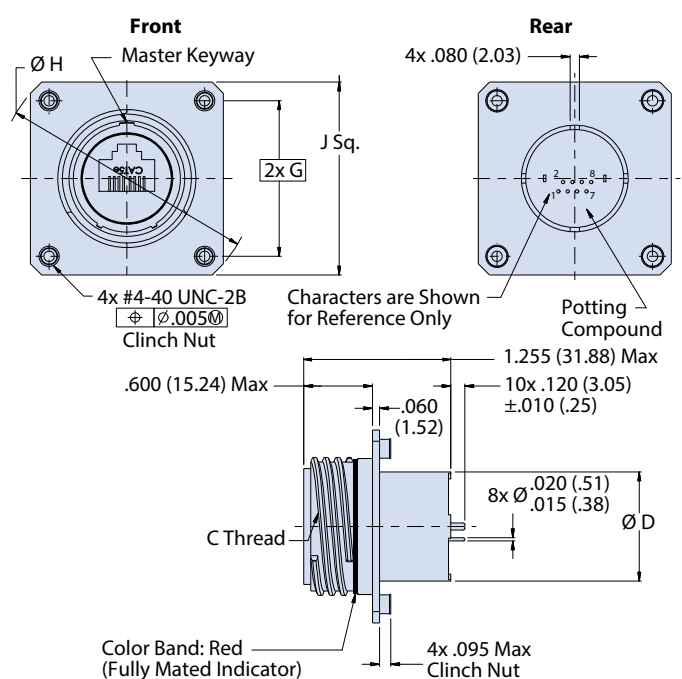
SHELL STYLE 02 FRONT OR REAR PANEL MOUNT SQUARE FLANGE RECEPTACLE

RJ45 Jack Category (Cat 5e) Orientation 3 Shown



SHELL STYLE 12 AND 22 REAR PANEL MOUNT SQ FLANGE RECEPTACLE WITH CLINCH NUTS

RJ45 Jack Category (CAT 5e) Orientation 3 Shown



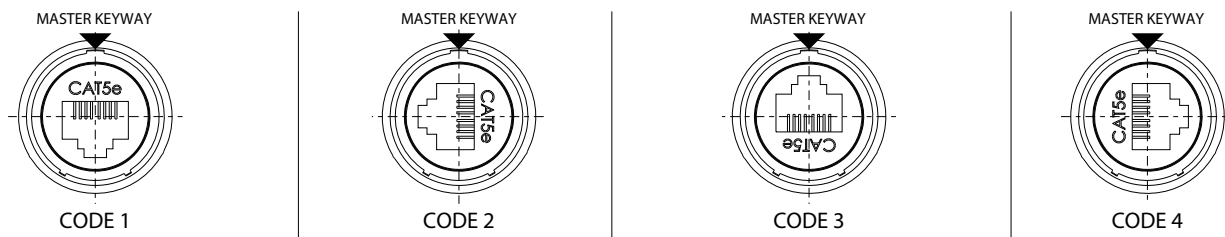


RJ45 CAT 5E ETHERNET COMPATIBLE Series 801, 804 and 805 Mighty Mouse 805-303 Triple-Start Receptacle with RJ45 Jack to Solder Cup Termination



How To Order									
Sample Part Number	805-303	NF	07	G	19	5H	A	1	
Series	805-303 = Solder Cup								
Material and Finish ¹	NF = Aluminum/Cadmium, Olive Drab M = Aluminum/Electroless Nickel MT = Aluminum/Nickel PTFE ZNU = Aluminum/Black Zinc Nickel								
Shell Style ¹	02 = Front or Rear Panel Mount Square Flange Receptacle 12 = Rear Panel Mount Square Flange Receptacle with "Non-Locking" Clinch Nuts 22 = Rear Panel Mount Square Flange Receptacle with "Locking" Clinch Nuts 07 = Rear Panel Mount Jam Nut Receptacle								
Grounding	G = Shielded and grounded to shell For improved 360° shielding performance select shell size 21								
Shell Size	19 = Shell Size 19 21 = Shell Size 21								
RJ45 Category	5H = Cat 5E For Cat 6A applications consult factory								
Alternate Key Positions ¹	A, B, C, D, E, F ; A = Normal								
RJ45 Orientation Option	1, 2, 3, 4								

RJ45 RECEPTACLE ORIENTATION OPTIONS (PARTIAL VIEWS SHOWN)



Square Flange Mount Dimensions									
Shell Size	Ø A	B Flat	C Thread	Ø D	Ø E	F SQ	G BSC	Ø H	J SQ
19	1.235 (31.69)	1.205 (30.61)	1.1875-.1P-.3L-TS-2A	.912 (23.16)	2.094 (53.19)	1.537 (39.04)	1.327 (33.71)	2.197 (55.80)	1.647 (41.83)
21	1.360 (34.54)	1.330 (33.78)	1.3125-.1P-.3L-TS-2A	1.017 (25.83)	2.270 (57.66)	1.663 (42.24)	1.452 (36.88)	2.380 (60.45)	1.772 (45.01)

Jam Nut and Plug Dimensions				
Shell Size	Ø K	L	M Flat	N Thread
19	1.450 (36.83)	1.420 (36.07)	1.221 (31.01)	1.2500-28 UN-2A
21	1.590 (40.39)	1.560 (39.62)	1.350 (34.29)	1.3750-28 UN-2A

NOTES

- See Section A for recommended panel cutout dimensions, additional finishes and alternate keyway positions
- Meets IP67 sealing requirement in unmated condition
- Materials/Finishes:
 - Insulators: high grade rigid dielectric/n.a.
 - contacts: copper alloy, gold plated
 - seals: silicone based elastomer
 - RJ45 coupler housing: UL94V-0 compliant ABS or PPS
 - hardware: stainless steel/passivated

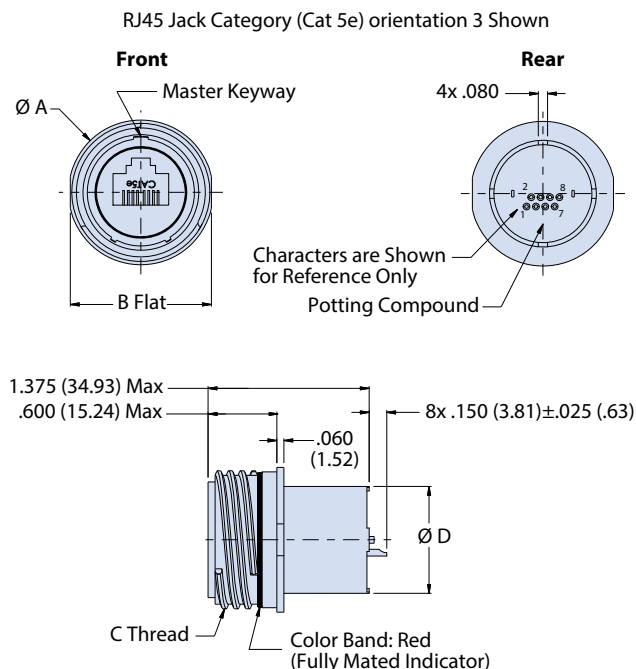


RJ45 CAT 5E ETHERNET COMPATIBLE Series 801, 804 and 805 Mighty Mouse

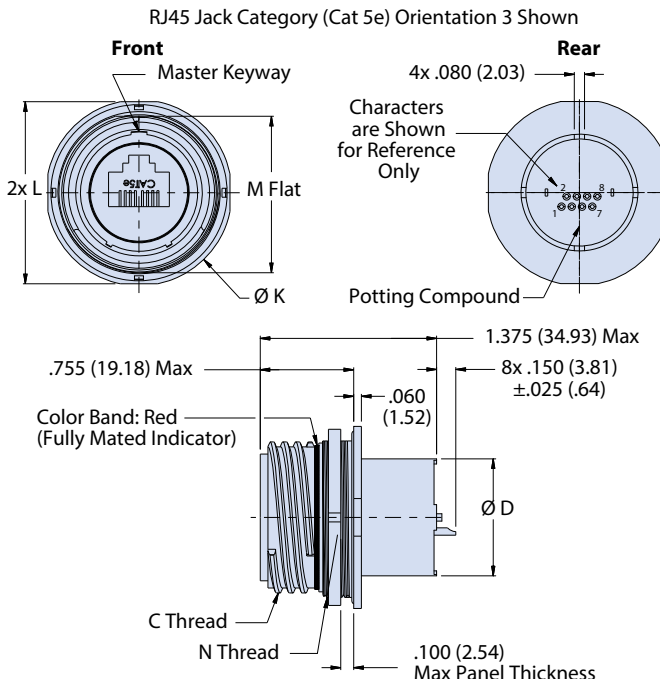
805-303 Triple-Start Receptacle with RJ45 Jack to Solder Cup Termination



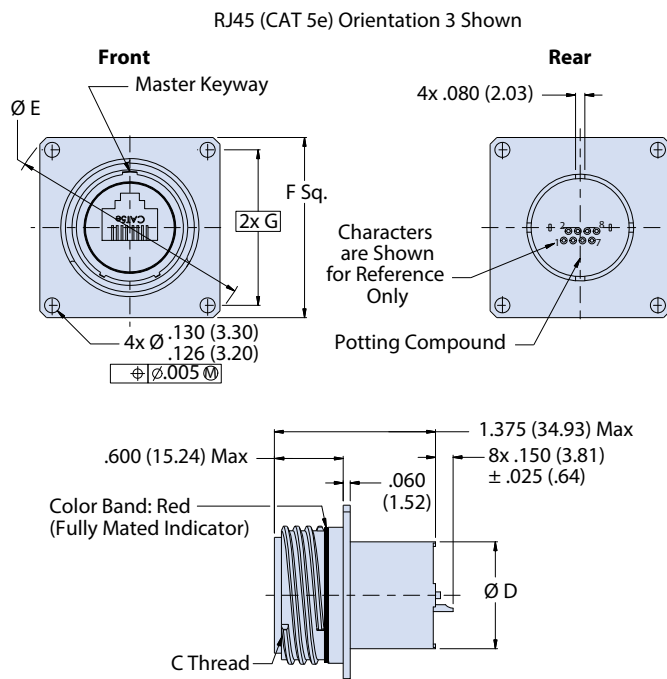
SHELL STYLE 01 INLINE



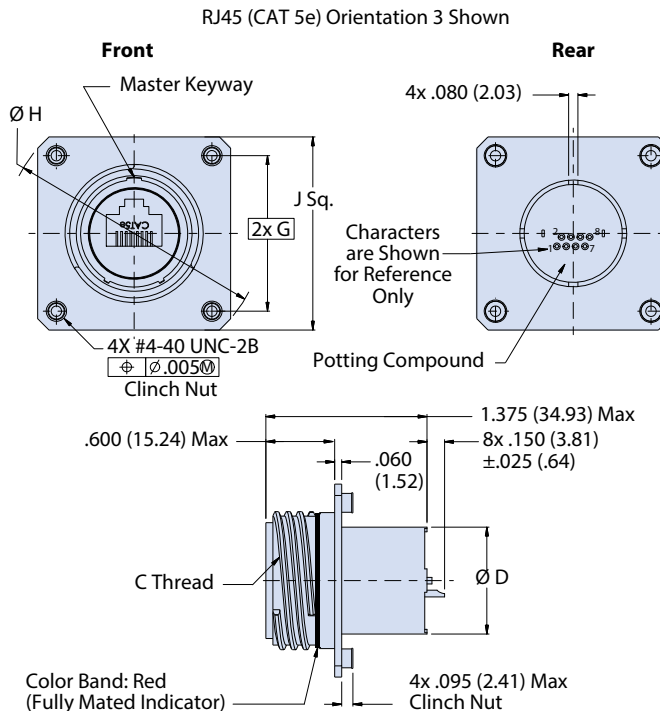
SHELL STYLE 07 JAM NUT



SHELL STYLE 02 FRONT OR REAR PANEL MOUNT SQUARE FLANGE RECEPTACLE



SHELL STYLE 12 AND 22 REAR PANEL MOUNT SQ FLANGE RECEPTACLE WITH CLINCH NUTS



SERIES 80 MIGHTY
MOUSE FIELD-READY
STANDARD USB

SUPERSEAL™



Series 801, 804 and 805 Mighty Mouse connectors with superior sealing, shielding and a variety of termination options.



Features

- Superior sealing— IP67 unmated and IP68 when mated—for complete system protection against water, sand and dust
- Couple, Crimp contact, PC tail and solder cup termination options available
- Integral banding porch or connector accessory interface
- Standard USB 2.0 plugs and receptacles
- Series 804 push/pull, Series 801 double-start or Series 805 triple-start, stub ACME threaded coupling.
- Less than half the size and weight compared to MIL-DTL-38999 type solutions



Glenair, Inc.
1211 Air Way
Glendale, CA 91201-2497
818-247-6000
sales@glenair.com
www.glenair.com



USB 2.0 TYPE A

Series 801, 804 and 805 Mighty Mouse



Product Selection Guide

Series 801

Double-Start



801-340

Page L-2

SuperSeal™ Coupler with Accessory Options and USB Male-to-Female (Plug) or Female-to-Female (Receptacle).

801-341

Page L-4

SuperSeal™ Connector with Accessory Options and USB Male (Plug) or Female (Receptacle) to Crimp Removable Contacts.

801-342 PC Tail or 801-343 Solder Cup

Page L-6

SuperSeal™ Receptacles with USB Female Interface to PC Tail or Solder Cup Termination.

Series 804

Push/Pull



804-340

Page L-8

SuperSeal™ Coupler with Accessory Options and USB Male-to-Female (Plug) or Female-to-Female (Receptacle).

804-341

Page L-10

SuperSeal™ Connectors with Accessory Options and USB Male (Plug) or Female (Receptacle) to Rear Release Crimp Socket Contacts.

804-342 PC Tail and 801-343 Solder Cup

Page L-12

SuperSeal™ Receptacles with USB Female Interface to PC Tail or Solder Cup Termination.

Series 805

Triple-Start



805-340

Page L-14

SuperSeal™ Coupler with Accessory Options and USB Male-to-Female (Plug) or Female-to-Female (Receptacle).

805-341

Page L-16

SuperSeal™ Connectors with Accessory Options and USB Male (Plug) or Female (Receptacle) to Rear Release Crimp Socket Contacts. .

805-342 PC Tail

Page L-18

SuperSeal™ Receptacle with USB Female Interface to PC Tail Termination.

805-343 Solder Cup

Page L-20

SuperSeal™ Receptacle with USB Female Interface to Solder Cup Termination.



USB 2.0 TYPE A Series 801, 804 and 805 Mighty Mouse



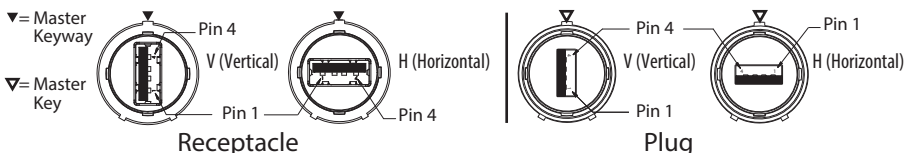
801-340 Coupler with USB Male-to-Female (Plug) or Female-to-Female (Receptacle)

How To Order									
Sample Part Number	801-340	-	NF	07	-16	2	A	A	H
Series	801-340								
Rear Accessory Option	- = Accessory Thread and Teeth S = Integrated Banding Platform B = Integrated Boot Adaptor								
Material and Finish ¹	NF = Aluminum/Cadmium, Olive Drab M = Aluminum/Electroless Nickel MT = Aluminum/Nickel PTFE ZNU = Aluminum/Black Zinc Nickel								
Shell Style ¹	01 = In Line Receptacle 02 = Front or Rear Panel Mount Square Flange Receptacle 07 = Rear Panel Mount Jam Nut Receptacle 26 = Plug								
Shell Size	16 = Shell Size 16								
USB Performance	2 = USB 2.0								
USB Type	A = Type A								
Alternate Key Positions ¹	A, B, C, D, E, F								
USB Orientation	H = Horizontal V = Vertical								

NOTES

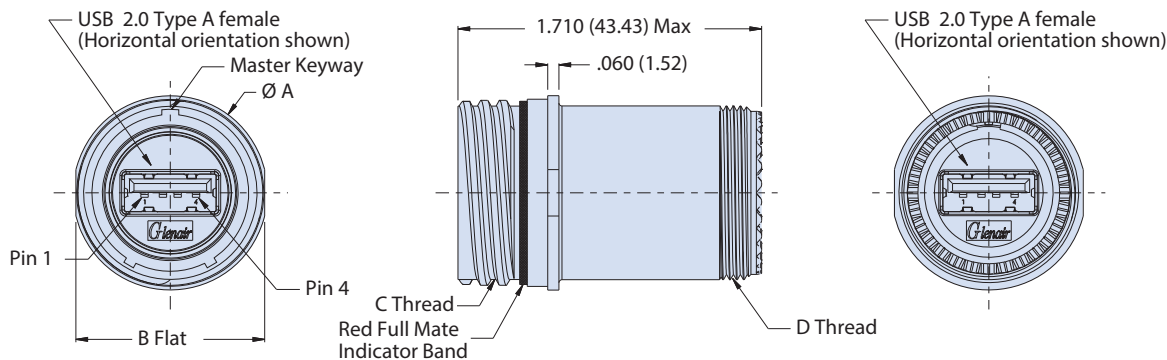
- See Section A for recommended panel cutout dimensions, additional finishes and alternate keyway positions.
- Meets IP67 sealing requirement in unmated condition

USB 2.0 ORIENTATION OPTIONS



Dimensions											
Size Shell	Ø A	B Flat	C Threads	D Threads	Ø E	F Sq	G Bsc	Ø J	K Flat	M Threads	Ø N
16	1.040 (26.42)	1.010 (25.65)	1.0000-.1P-.2L-DS-2A	.9375-20 UNEF-2A	1.625 (41.28)	1.219 (30.96)	.981 (24.92)	1.264 (32.11)	1.230 (31.24)	1.0625-20 UN-2A	1.230 (31.24)

SHELL STYLE 01 INLINE RECEPTACLE



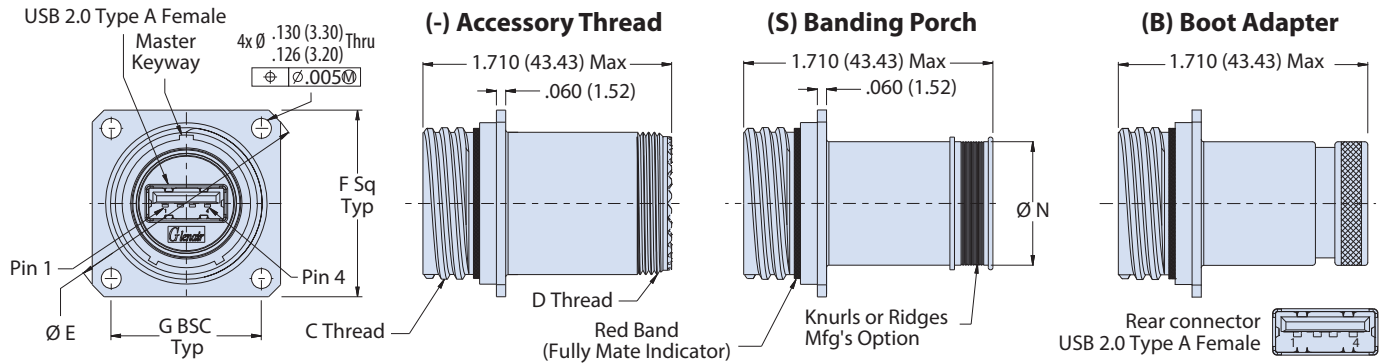


USB 2.0 TYPE A Series 801, 804 and 805 Mighty Mouse 801-340 Coupler with USB Male-to-Female (Plug) or Female-to-Female (Receptacle)

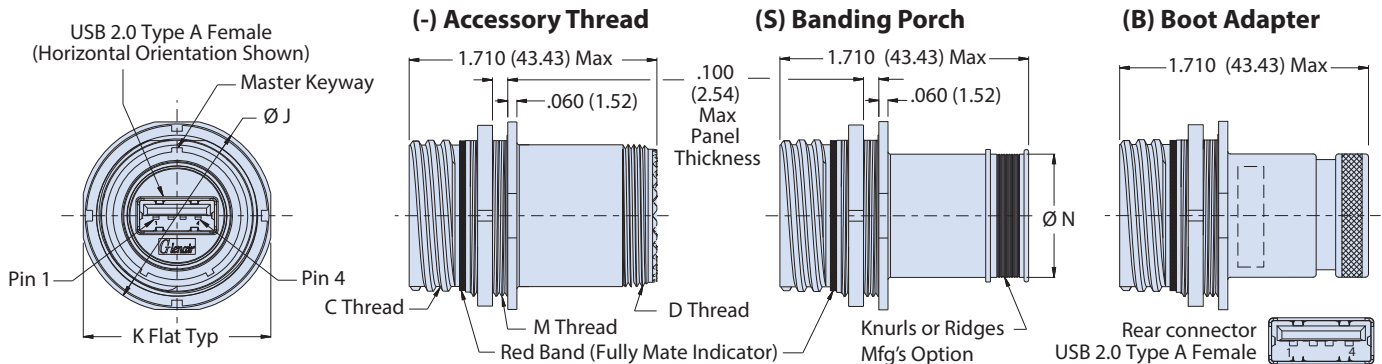


Series 801 Double Start

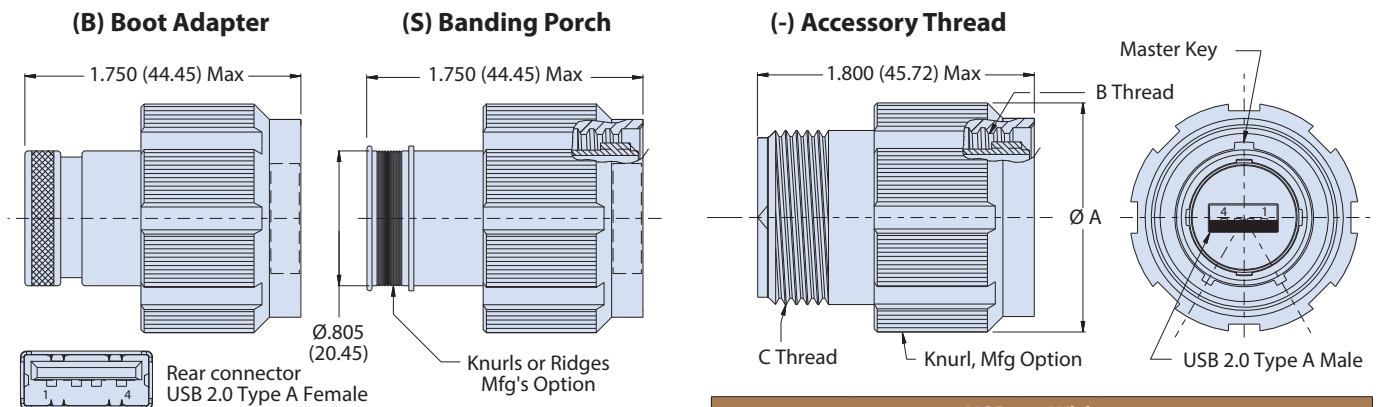
SHELL STYLE 02 FRONT OR REAR SQUARE FLANGE RECEPTACLE



SHELL STYLE 07 REAR PANEL MOUNT JAM NUT RECEPTACLE



SHELL STYLE 26 PLUG



Plug Dimensions			
Shell Size	Ø A	B Threads	C Threads
16	1.340 (34.04)	1.0000-1P-2L-2B	.9375-20 UNEF-2A

USB 2.0 Wiring				
Pin	Name	Cable Color(USB)	Desc.	Recommended Wire Size (AWG)
1	(V Bus)	Red	+5 V	22
2	(D-)	White	Data -	28
3	(D+)	Green	Data +	28
4	(GND)	Black	Ground	22



USB 2.0 TYPE A Series 801, 804 and 805 Mighty Mouse



801-341 Connector with USB Male (Plug) or Female (Receptacle) to Crimp Removable Contacts

Series 801 Double Start

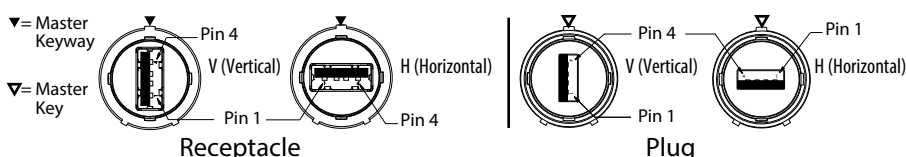
How To Order									
Sample Part Number	801-341	-	NF	07	-16	2	A	A	H
Series	801-341								
Rear Accessory Option	- = Accessory Thread and Teeth B = Integrated Boot Adaptor S = Integrated Banding Platform								
Material and Finish ¹	NF = Aluminum/Cadmium, Olive Drab M = Aluminum/Electroless Nickel MT = Aluminum/Nickel PTFE ZNU = Aluminum/Black Zinc Nickel								
Shell Style ¹	01 = In Line Receptacle 02 = Front or Rear Panel Mount Square Flange Receptacle 07 = Rear Panel Mount Jam Nut Receptacle 26 = Plug								
Shell Size	16 = Shell Size 16								
USB Performance	2 = USB 2.0								
USB Type	A = Type A								
Alternate Key Positions ¹	A, B, C, D, E, F; Omit for single keyway (non polarized)								
USB Orientation	H = Horizontal V = Vertical								

NOTES

- See Section A for recommended panel cutout dimensions, additional finishes and alternate keyway positions.
- Meets IP67 sealing requirement in unmated condition
- Supplied with size 23 socket contacts (809-002 supplied loose)
1 extra contact provided
- Material/Finish
 - Shell, jam nut: al alloy or cnes
 - Seal/o-ring fluorosilicone

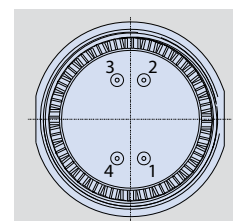
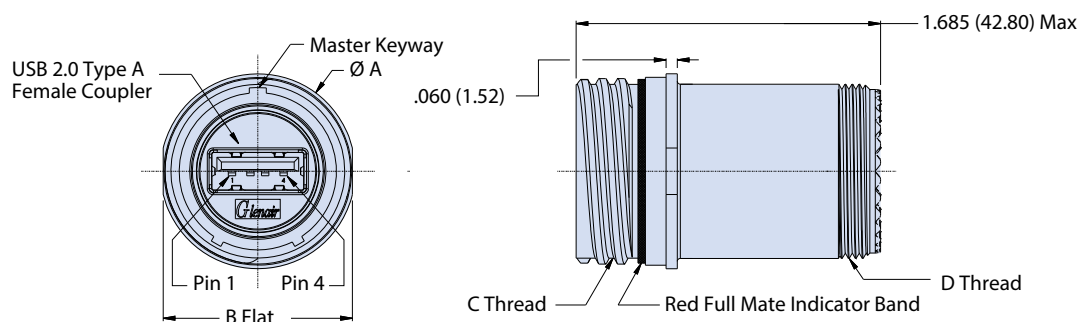
USB 2.0 Wiring				
Pin	Name	Cable Color (USB)	Desc.	Recommended Wire Size (AWG)
1	(V Bus)	Red	+5 V	22
2	(D-)	White	Data -	28
3	(D+)	Green	Data +	28
4	(GND)	Black	Ground	22

USB 2.0 ORIENTATION OPTIONS



Receptacle Dimensions											
Size Shell	Ø A	B Flat	C Threads	D Threads	Ø E	F Sq	G Bsc	Ø J	K Flat	M Threads	Ø N
16	1.040 (26.42)	1.010 (25.65)	1.0000-.1P-.2L-DS-2A	.9375-20 UNEF-2A	1.625 (41.28)	1.219 (30.96)	.981 (24.92)	1.264 (32.11)	1.230 (31.24)	1.0625-20 UN-2A	1.230 (31.24)

SHELL STYLE 01 IN-LINE RECEPTACLE



Rear contact positions apply to all shell styles



USB 2.0 TYPE A

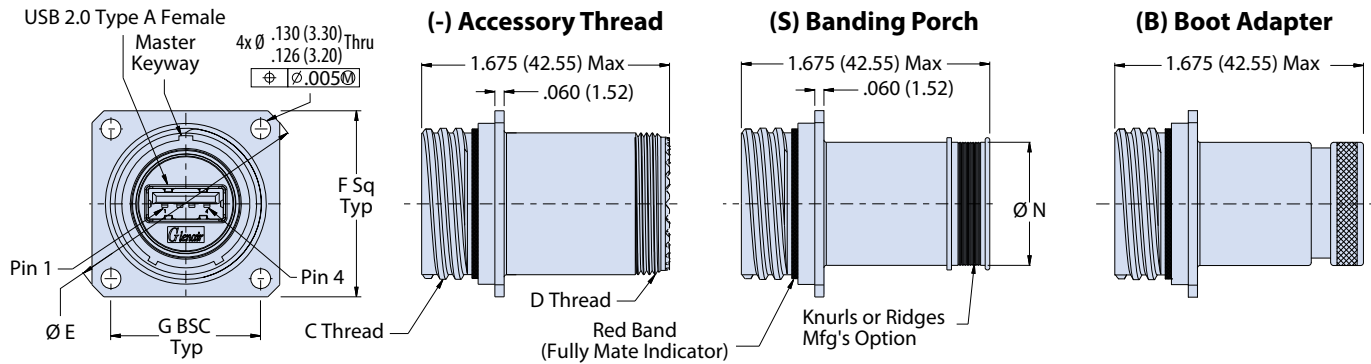
Series 801, 804 and 805 Mighty Mouse



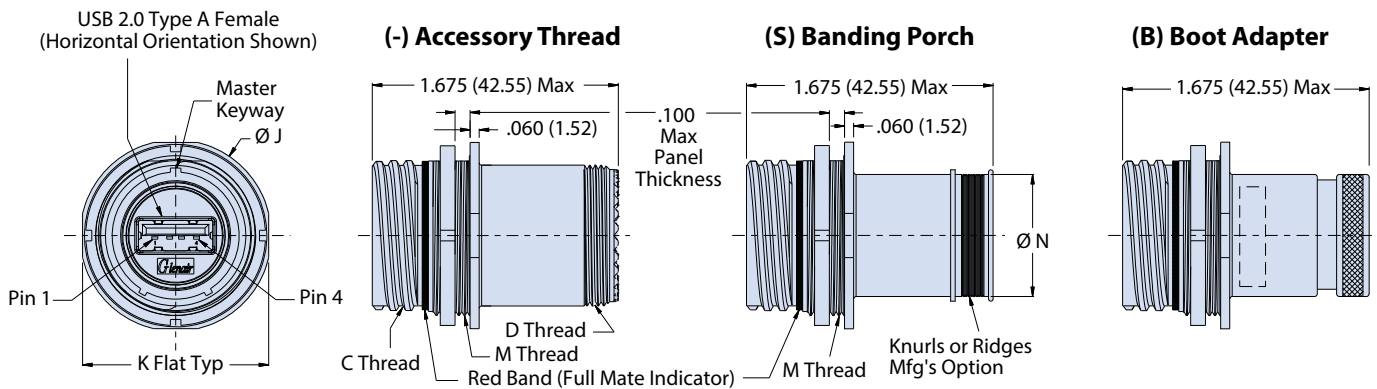
801-341 Connector with USB Male (Plug) or Female (Receptacle) to Crimp Removable Contacts

Series 801 Double Start

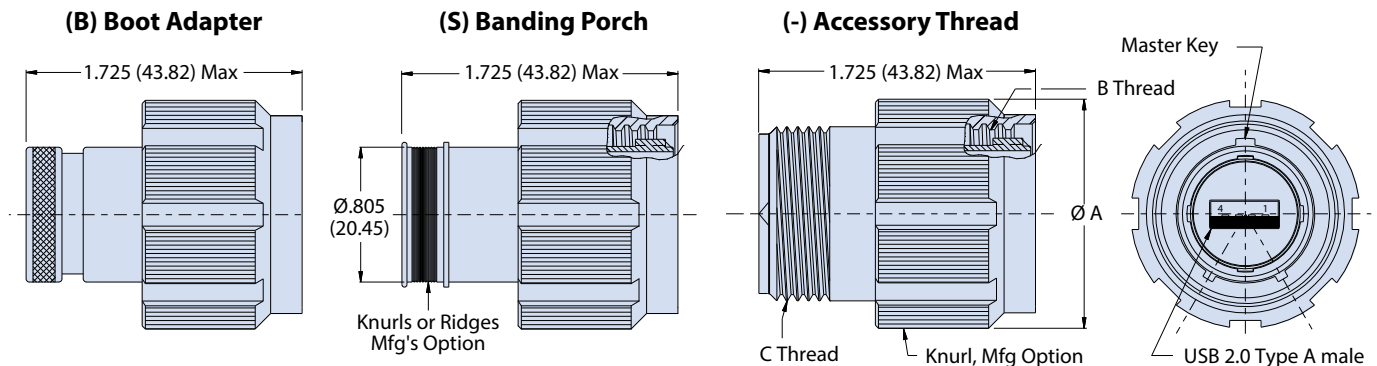
SHELL STYLE 02 FRONT OR REAR PANEL MOUNT SQUARE FLANGE RECEPTACLE



SHELL STYLE 07 REAR PANEL MOUNT JAM NUT RECEPTACLE



SHELL STYLE 26 PLUG



Plug Diameter			
Shell Size	ØA	B Thread	C Threads
16	1.340 (34.04)	1.0000-.1P-.2L-2B	.9375-20 UNEF-2A



USB 2.0 TYPE A

Series 801, 804 and 805 Mighty Mouse



801-342 or 801-343 Receptacles with USB Female Interface to PC Tail or Solder Cup Termination

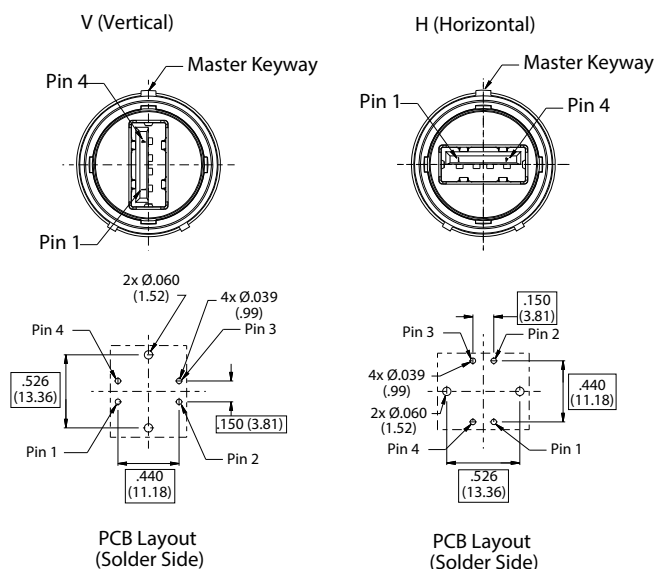
Series 801 Double Start

How To Order								
Sample Part Number	801-342	NF	07	-16	2	A	A	H
Series	801-342 = PC Tail 801-343 = Solder Cup							
Material and Finish ¹	NF = Aluminum/Cadmium, Olive Drab M = Aluminum/Electroless Nickel MT = Aluminum/Nickel PTFE ZNU = Aluminum/Black Zinc Nickel							
Shell Style ¹	02 = Front or Rear, Square Flange Panel Mount Receptacle 07 = Jam Nut Receptacle, Rear Panel Mount							
Shell Size	16 = Shell Size 16							
USB Performance	2 = USB 2.0							
USB Type	A = Type A							
Aternate Key Positions ¹	A, B, C, D, E, F							
USB Orientation	H = Horizontal V = Vertical							

Dimensions							
Size Shell	C Threads	Ø E	F Sq	G Bsc	Ø J	K Flat	M Threads
16	1.0000-.1P-.2L-DS-2A	1.625 (41.28)	1.219 (30.96)	0.981 (24.92)	1.264 (32.11)	1.230 (31.24)	1.0625-20 UN-2A

USB 2.0 Wiring				
Pin	Name	Cable Color (USB)	Description	Recommended Wire Size (AWG)
1	(V Bus)	Red	+5 V	22
2	(D-)	White	Data -	28
3	(D+)	Green	Data +	28
4	(GND)	Black	Ground	22

USB 2.0 ORIENTATION OPTIONS



PCB layouts apply to 801-342. USB orientation applies to 801-342 and 801-343



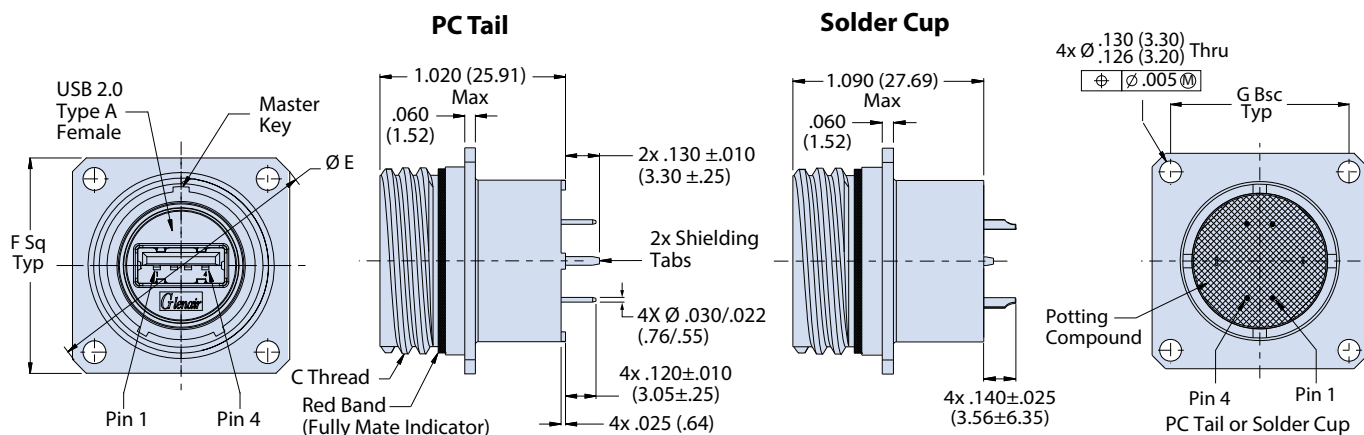
USB 2.0 TYPE A

Series 801, 804 and 805 Mighty Mouse

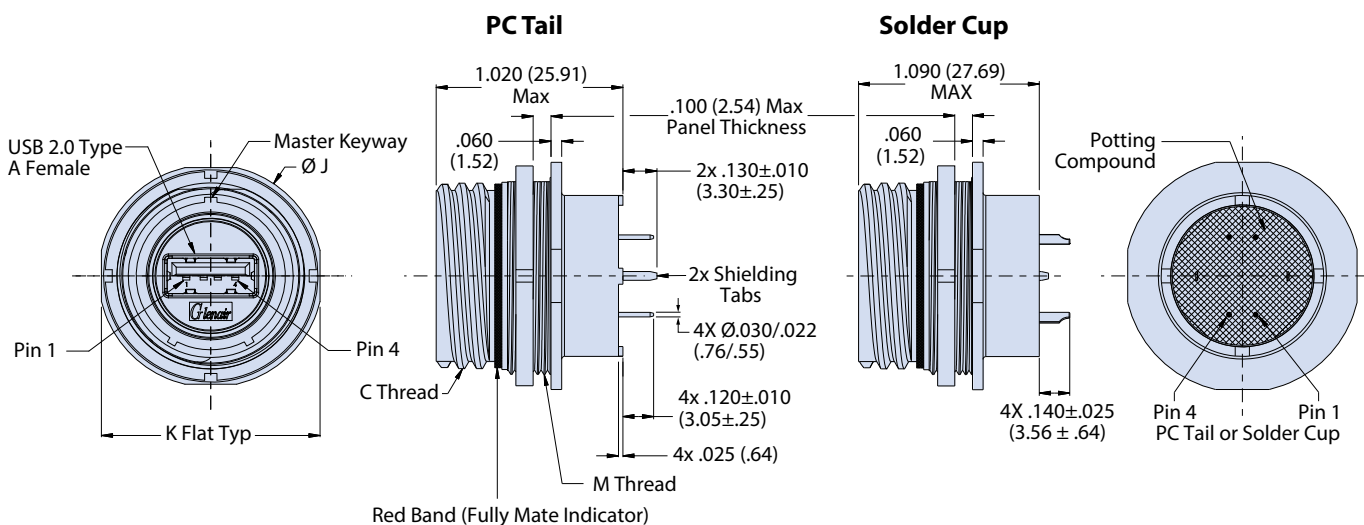


801-342 or 801-343 Receptacles with USB Female Interface to PC Tail or Solder Cup Termination

SHELL STYLE 02 SQUARE FLANGE RECEPTACLE FOR 801-342 PC TAIL AND 801-343 SOLDER CUP



SHELL STYLE 07 JAM NUT RECEPTACLE FOR 801-342 PC TAIL AND 801-343 SOLDER CUP



NOTES

1. See Section A for recommended panel cutout dimensions, additional finishes and alternate keyway positions.
2. Meets IP67 sealing requirement in unmated condition
3. Material/Finish
 - Shell, jam nut: al alloy or cres
 - Seal/o-ring fluorosilicone
 - Sealant: RTV



USB 2.0 TYPE A

Series 801, 804 and 805 Mighty Mouse



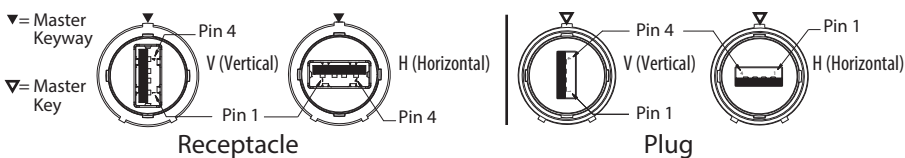
804-340 Coupler with USB Male-to-Female (Plug) or Female-to-Female (Receptacle)

Series 804 Push/Pull

How To Order									
Sample Part Number	804-340	-	NF	07	-14	2	A	A	H
Series	804-340								
Rear Accessory Option	- = Accessory Thread and Teeth B = Integrated Boot Adaptor S = Integrated Banding Platform								
Material and Finish ¹	NF = Aluminum/Cadmium Olive Drab M = Aluminum/Electroless Nickel MT = Aluminum/Nickel PTFE ZNU = Aluminum/Black Zinc Nickel								
Shell Style ¹	01 = In Line Receptacle 00 = Jam Nut Receptacle, Front Panel Mount 07 = Jam Nut Receptacle, Rear Panel Mount 06 = Plug								
Shell Size	14 = Shell Size 14								
USB Performance	2 = USB 2.0								
USB Type	A = Type A								
Alternate Key Positions ¹	A, B, C, D, E, F ; Omit for single keyway (non polarized)								
USB Orientation	H = Horizontal V = Vertical								

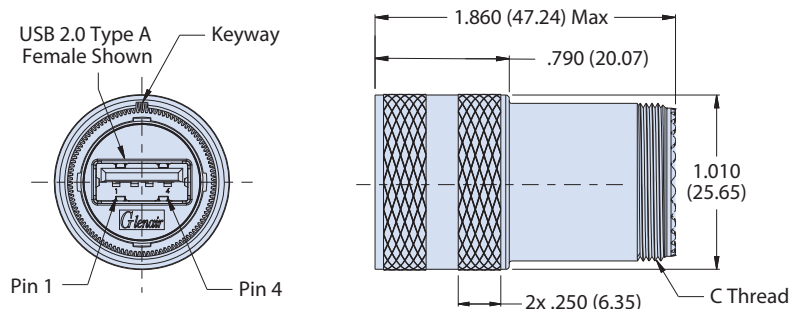
USB 2.0 Wiring				
Pin	Name	Cable Color (USB)	Desc.	Recommended Wire Size (AWG)
1	(V Bus)	Red	+5 V	22
2	(D-)	White	Data -	28
3	(D+)	Green	Data +	28
4	(GND)	Black	Grnd	22

USB 2.0 ORIENTATION OPTIONS



Dimensions						
Size Shell	Mounting Style	Ø A	B Threads	C Threads	Ø D	K Threads
14	Front Mount	--	--	.9375-20 UNEF-2A	1.390 (35.31)	1.0620-20 UN-2A
	Rear Mount	1.325 (33.66)	1.0000-28 UN-2A	.9375-20 UNEF-2A	--	--

SHELL STYLE 01 IN-LINE RECEPTACLE



NOTES

- See Section A for recommended panel cutout dimensions, additional finishes and alternate keyway positions.
- Meets IP67 sealing requirement in unmated condition

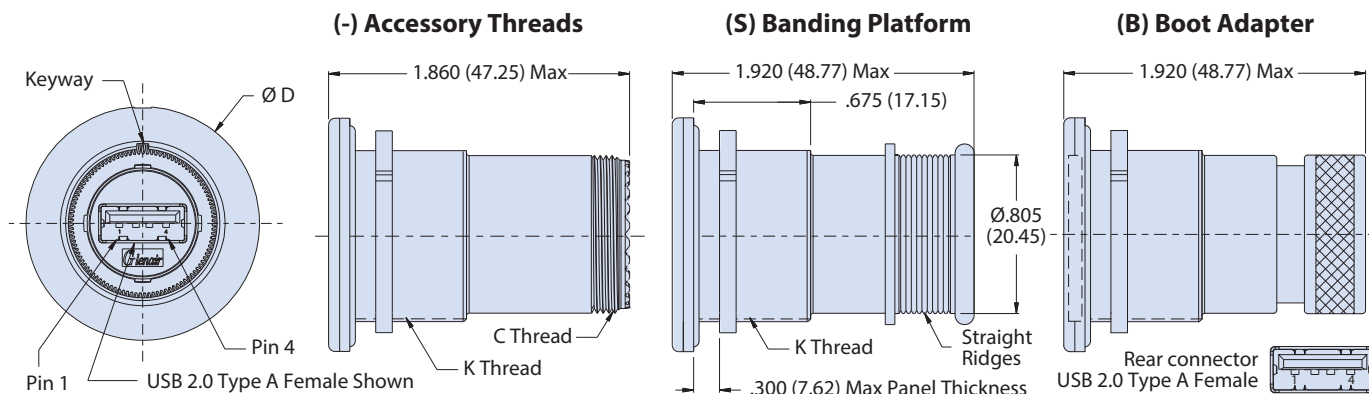


USB 2.0 TYPE A Series 801, 804 and 805 Mighty Mouse 804-340 Coupler with USB Male-to-Female (Plug) or Female-to-Female (Receptacle)

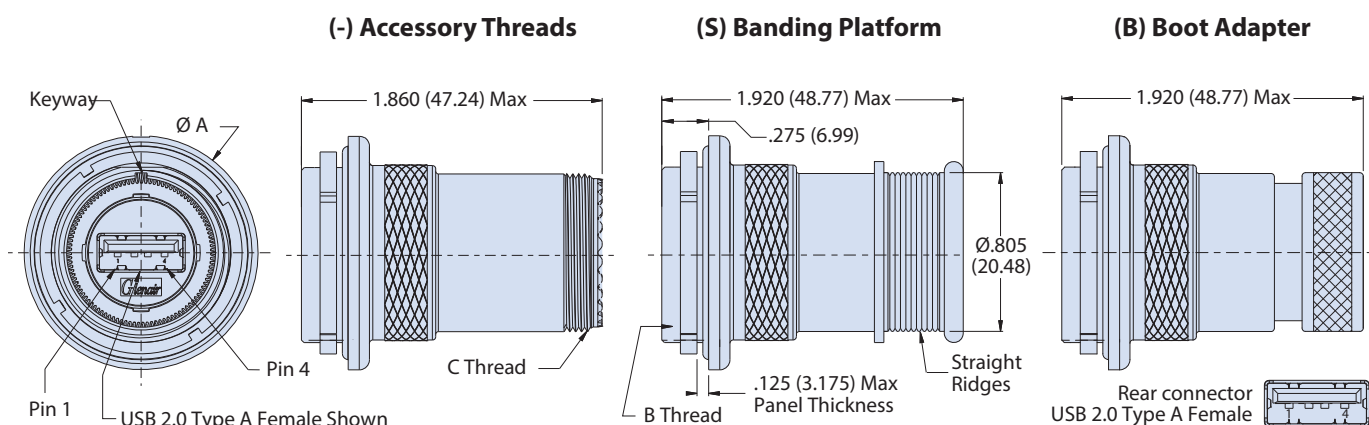


Series 804 Push/Pull

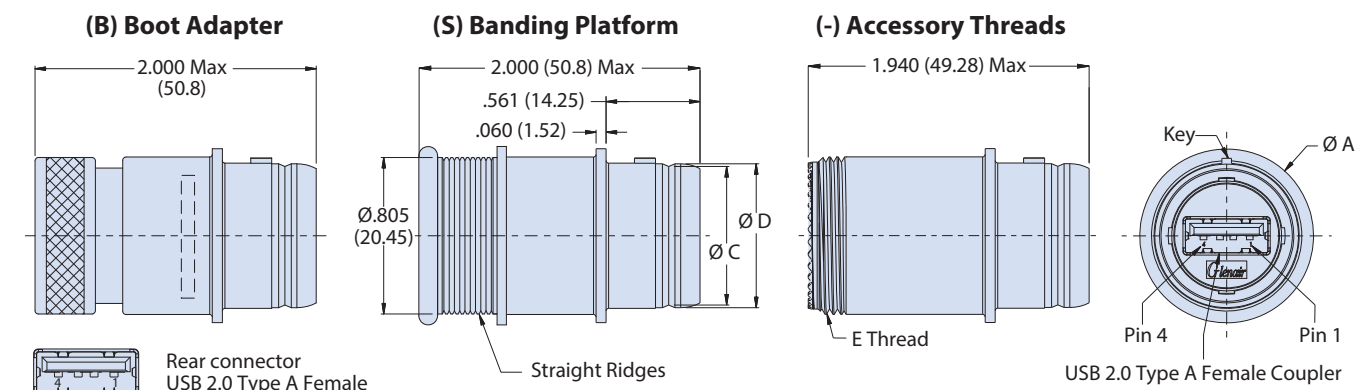
SHELL STYLE 00 FRONT PANEL MOUNT JAM NUT RECEPTACLE



SHELL STYLE 07 REAR PANEL MOUNT JAM NUT RECEPTACLE



SHELL STYLE 06 PLUG



Plug Dimensions				
Size Shell	Ø A Max	Ø C	Ø D	E Thd
14	.985 (25.02)	.768 (19.51)	.800 (20.32)	.9375-20 UNEF-2A



USB 2.0 TYPE A

Series 801, 804 and 805 Mighty Mouse



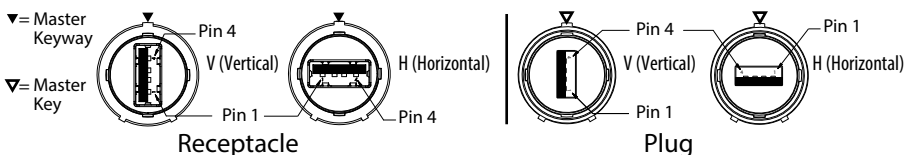
804-341 Connectors with USB Male (Plug) or Female (Receptacle) to Crimp Removable Contacts

Series 804 Push/Pull

How To Order									
Sample Part Number	804-341	-	NF	07	-14	2	A	A	H
Series	804-341								
Rear Accessory Option	- = Accessory Thread and Teeth B = Integrated Boot Adaptor S = Integrated Banding Platform								
Material and Finish ¹	NF = Aluminum/Cadmium, Olive Drab MT = Aluminum/Nickel PTFE M = Aluminum/Electroless Nickel ZNU = Aluminum/Black Zinc Nickel								
Shell Style ¹	01 = In Line Receptacle 00 = Front Panel Mount Jam Nut Receptacle 07 = Rear Panel Mount Jam Nut Receptacle 06 = Plug								
Shell Size	14 = Shell Size 14								
USB Performance	2 = USB 2.0								
USB Type	A = Type A								
Alternate Key Positions ¹	A, B, C, D, E, F; Omit for single keyway (non polarized)								
USB Orientation	H = Horizontal V = Vertical								

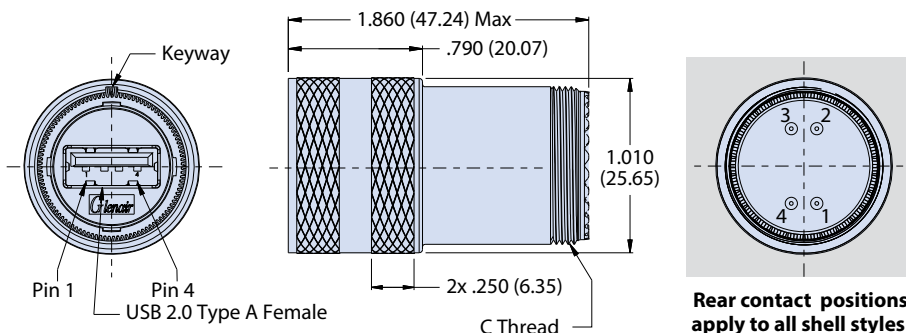
USB 2.0 Wiring				
Pin	Name	Cable Color (USB)	Desc.	Recommended Wire Size (AWG)
1	(V Bus)	Red	+5 V	22
2	(D-)	White	Data -	28
3	(D+)	Green	Data +	28
4	(GND)	Black	Ground	22

USB 2.0 ORIENTATION OPTIONS



Receptacle Dimensions						
Shell Size	Mounting Style	Ø A	B Threads	Ø D	K Threads	C Threads
14	Front Mount	-	-	1.390 (35.31)	1.0620-20 UN-2A	.9375-20 UNEF-2A
	Rear Mount	1.325 (33.66)	1.0000-28 UN-2A	-	-	.9375-20 UNEF-2A

SHELL STYLE 01 IN-LINE RECEPTACLE



NOTES

1. See Section A for recommended panel cutout dimensions, additional finishes and alternate keyway positions.
2. Meets IP67 sealing requirement in unmated condition
3. Supplied with size 23 crimp socket contacts (809-002 supplied loose)
4. Material/finish
 - Shell, jam nut: al alloy or cres
 - Seal/o-ring: fluorosilicone



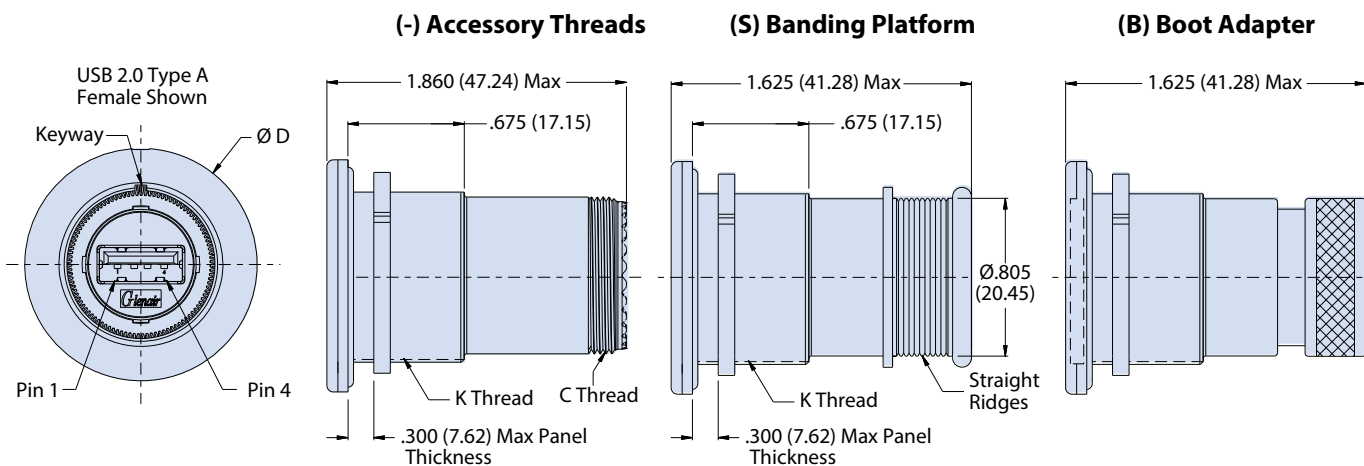
USB 2.0 TYPE A

Series 801, 804 and 805 Mighty Mouse

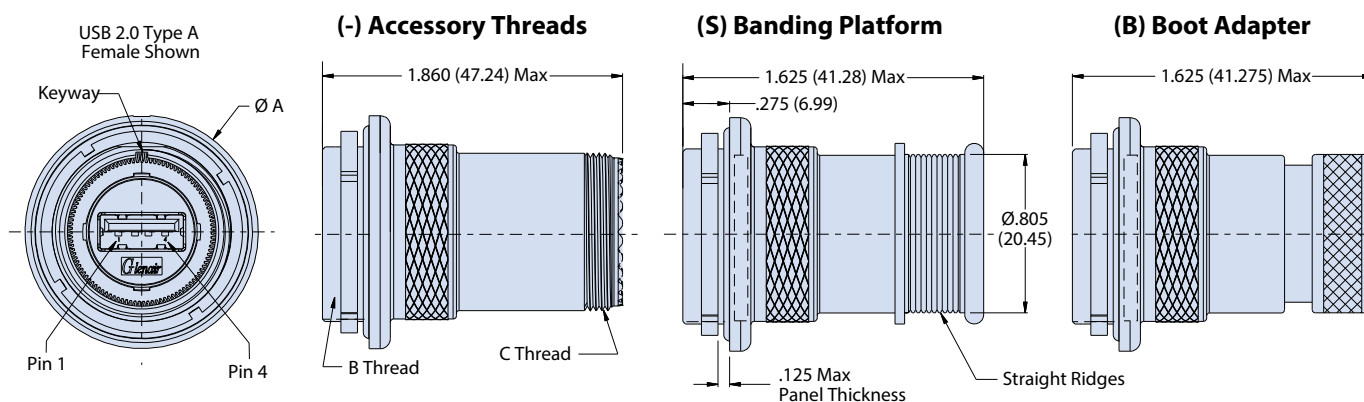


804-341 Connectors with USB Male (Plug) or Female (Receptacle) to Crimp Removable Contacts

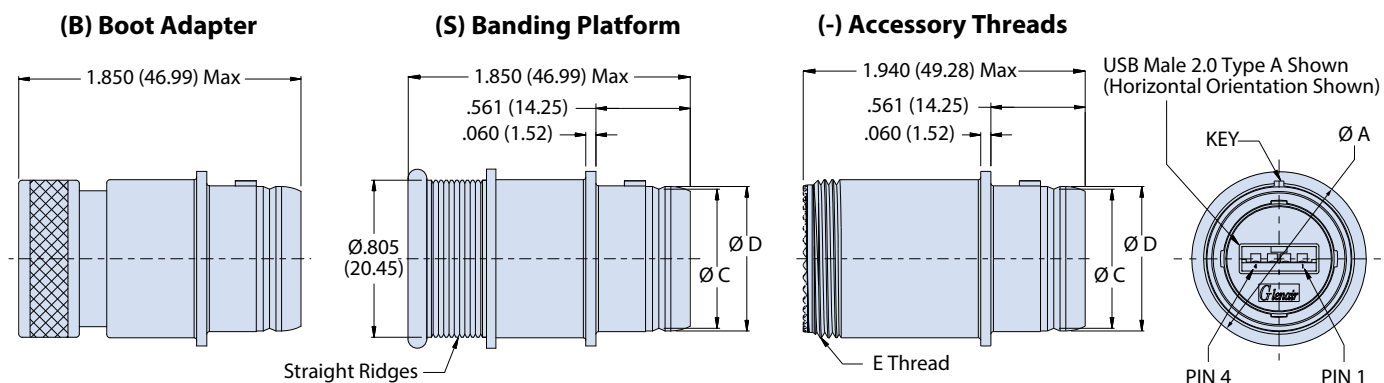
SHELL STYLE 00 FRONT PANEL MOUNT JAM NUT RECEPTACLE



SHELL STYLE 07 REAR PANEL MOUNT JAM NUT RECEPTACLE



SHELL STYLE 16 PLUG



Plug Dimensions				
Shell Size	Ø A	Ø C	Ø D	E Threads
14	.985 (25.02)	.768 (19.51)	.800 (20.32)	.9375-20 UNEF-2A



USB 2.0 TYPE A

Series 801, 804 and 805 Mighty Mouse



804-342 or 804-343 Receptacles with USB Female Interface to PC Tail or Solder Cup Termination

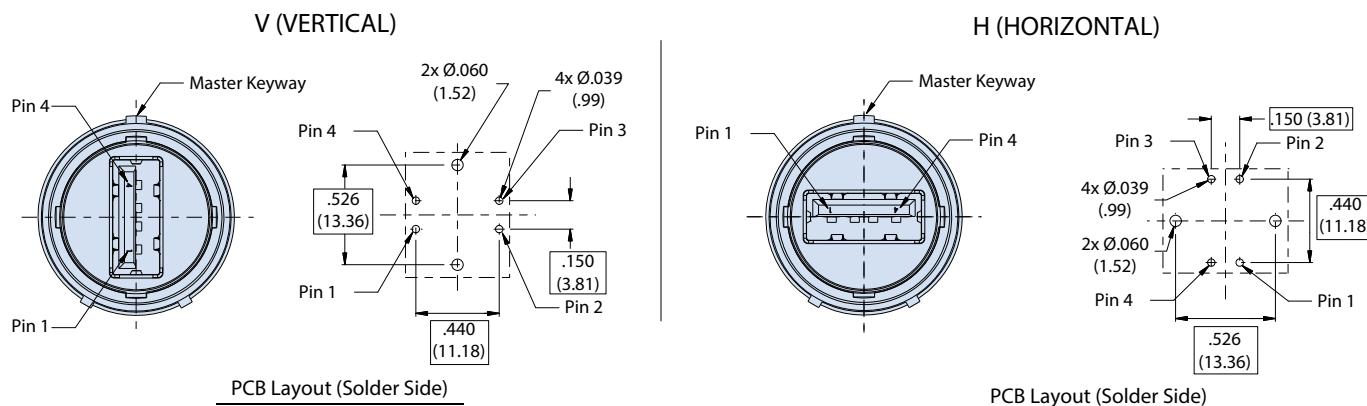
Series 804 Push/Pull

How To Order								
Sample Part Number	804-342	NF	07	-14	2	A	A	H
Series	804-342 = PC Tail 804-343 = Solder Cup							
Material and Finish ¹	NF = Aluminum/Cadmium, Olive Drab M = Aluminum/Electroless Nickel MT = Aluminum/Nickel PTFE ZNU = Aluminum/Black Zinc Nickel							
Shell Style ¹	07 = Rear Panel Mount Jam Nut Receptacle 00 = Front Panel Mount Jam Nut Receptacle							
Shell Size	14 = Shell Size 14							
USB Performance	2 = USB 2.0							
USB Type	A = Type A							
Alternate Key Positions ¹	A, B, C, D, E, F; Omit for single keyway (non polarized)							
USB Orientation	H = Horizontal V = Vertical							

USB 2.0 Wiring				
Pin	Name	Cable Color (USB)	Description	Recommended Wire Size (AWG)
1	(V Bus)	Red	+5 V	22
2	(D-)	White	Data -	28
3	(D+)	Green	Data +	28
4	(GND)	Black	Ground	22

Dimensions						
Shell Size	Mounting Style	Ø A	B Threads	Ø D	K Threads	C Threads
14	FRONT MOUNT	-	-	1.390 (35.31)	1.0620-20 UN-2A	.9375-20 UNEF-2A
	REAR MOUNT	1.325 (33.66)	1.0000-28 UN-2A	-	-	.9375-20 UNEF-2A

USB 2.0 RECEPTACLE ORIENTATION OPTIONS AND PCB FOOTPRINT





USB 2.0 TYPE A

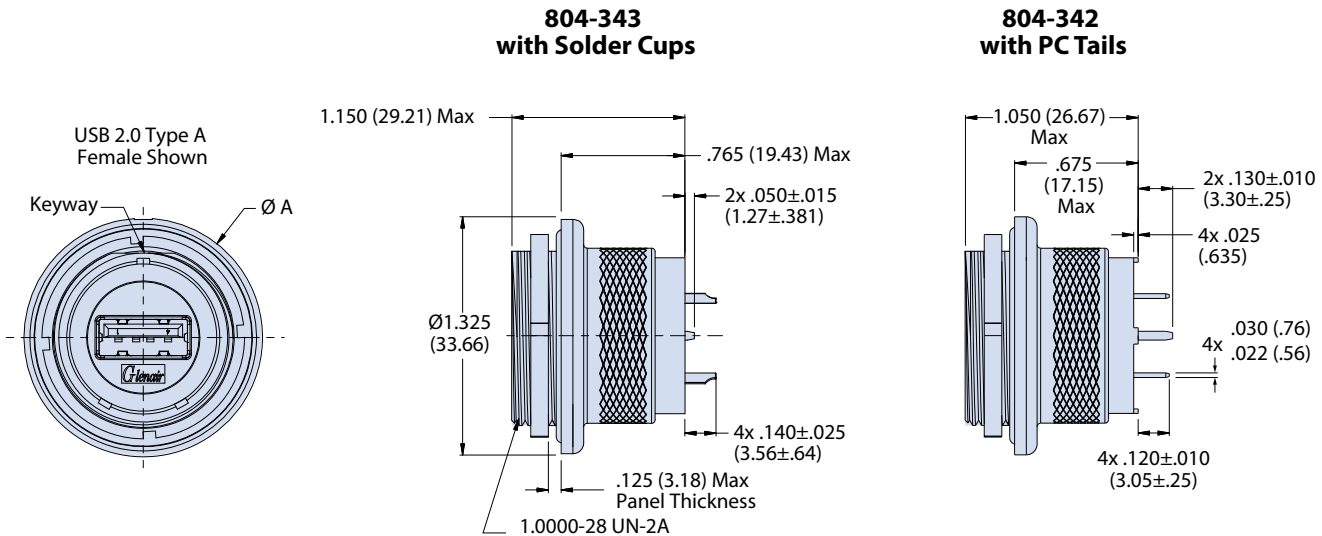
Series 801, 804 and 805 Mighty Mouse



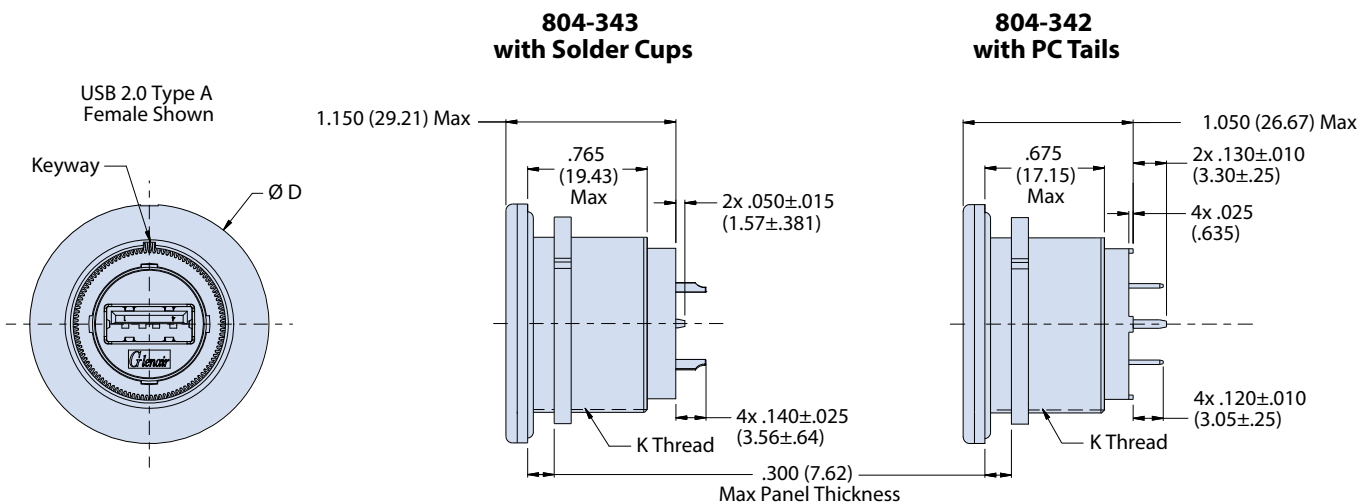
804-342 or 804-343 Receptacles with USB Female Interface to PC Tail or Solder Cup Termination

Series 804 Push/Pull

SHELL STYLE 07 JAM NUT RECEPTACLE FOR 804-342 PC TAIL AND 804-343 SOLDER CUP

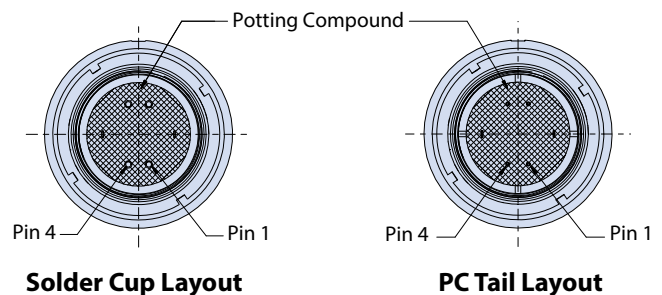


SHELL STYLE 00 JAM NUT RECEPTACLE FOR 804-342 PC TAIL AND 804-343 SOLDER CUP,



NOTES

- See Section A for recommended panel cutout dimensions, additional finishes and alternate keyway positions.
- Meets IP67 sealing requirement in unmated condition
- Material/finish
 - Shell, jam nut: al alloy or cres
 - Seal/o-ring: fluorosilicone
 - Sealant RTV





USB 2.0 TYPE A

Series 801, 804 and 805 Mighty Mouse



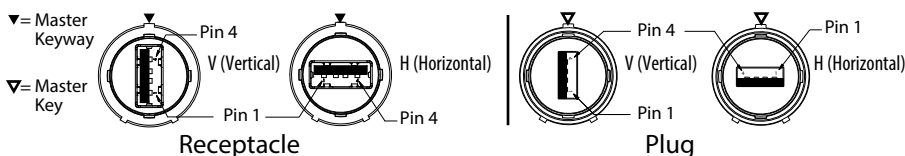
805-340 Coupler with USB Male-to-Female (Plug) or Female-to-Female (Receptacle)

Series 805 Triple Start

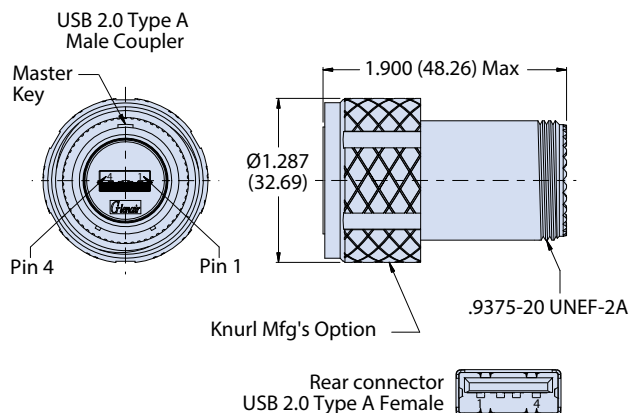
How To Order										
Sample Part Number		805-340	-	NF	07	-18	2	A	A	H
Series	805-340									
Rear Accessory Option	- = Accessory Thread and Teeth B = Integrated Boot Adaptor S = Integrated Banding Platform									
Material and Finish ¹	NF = Aluminum/Cadmium, Olive Drab M = Aluminum/Electroless Nickel MT = Aluminum/Nickel PTFE ZNU = Aluminum/Black Zinc Nickel									
Shell Style ¹	01 = In Line Receptacle 02 = Front or Rear Panel Mount Square Flange Receptacle 12 = Rear Panel Mount Square Flange Receptacle with "Non-Locking" Clinch Nuts 22 = Rear Panel Mount Square Flange Receptacle with "Locking" Clinch Nuts 07 = Rear Panel Mount Jam Nut Receptacle 16 = Plug									
Shell Size	18 = Shell Size 18									
USB Performance	2 = USB 2.0									
USB Type	A = Type A									
Alternate Key Positions ¹	A, B, C, D, E, F									
USB Orientation	H = Horizontal V = Vertical									

USB 2.0 Wiring				
Pin	Name	Cable Color (USB)	Desc.	Recommended Wire Size (AWG)
1	(V Bus)	Red	+5 V	22
2	(D-)	White	Data -	28
3	(D+)	Green	Data +	28
4	(GND)	Black	Ground	22

USB 2.0 ORIENTATION OPTIONS

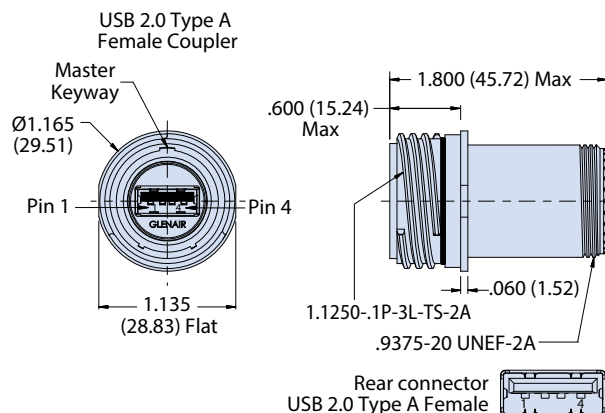


SHELL STYLE 16 PLUG



Accessory Thread Option

SHELL STYLE 01 IN-LINE RECEPTACLE



Accessory Thread Option



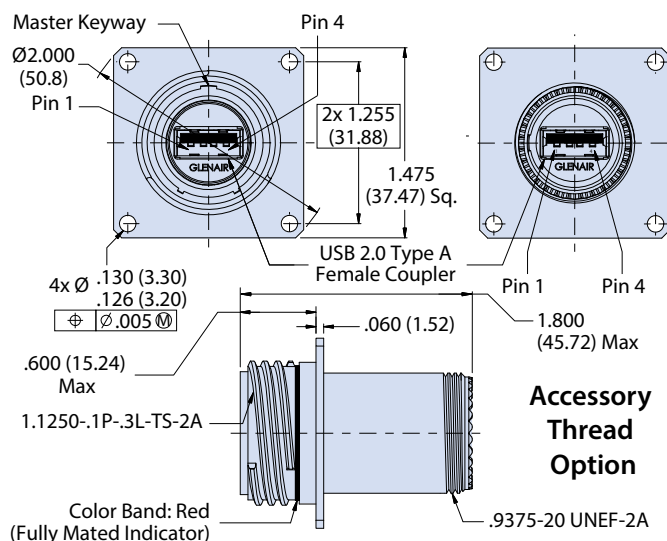
USB 2.0 TYPE A

Series 801, 804 and 805 Mighty Mouse

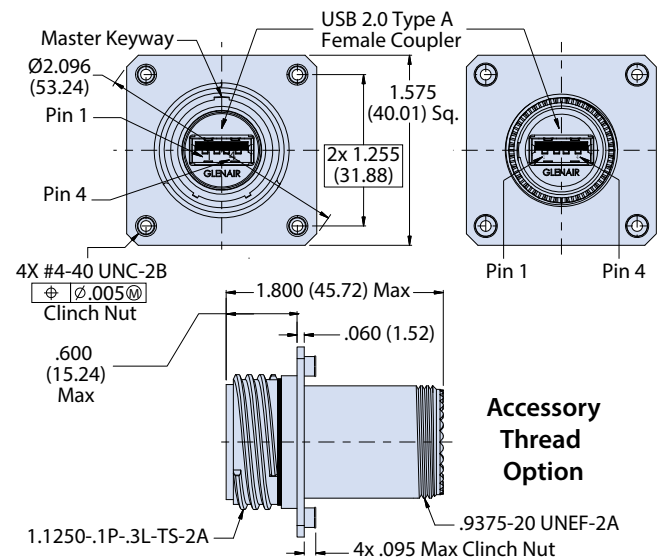


805-340 Coupler with USB Male-to-Female (Plug)
or Female-to-Female (Receptacle)

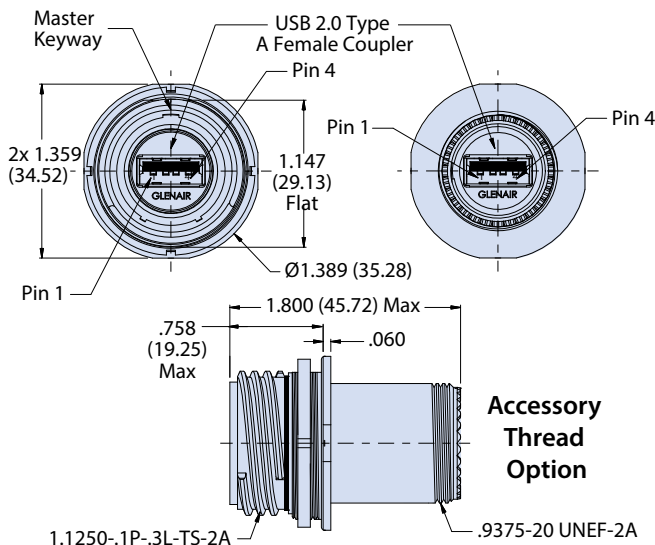
SHELL STYLE 02 FRONT OR REAR PANEL MOUNT SQUARE FLANGE RECEPTACLE



SHELL STYLE 12 & 22 FRONT OR REAR PANEL MOUNT RECEPTACLE WITH CLINCH NUTS



SHELL STYLE 07 REAR PANEL MOUNT JAM NUT RECEPTACLE

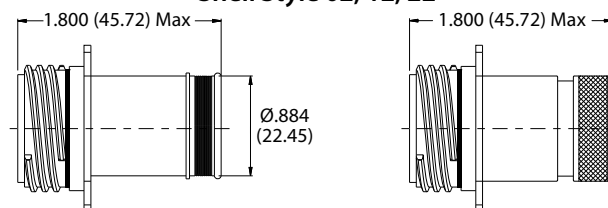


REAR ACCESSORY OPTIONS (AVAILABLE FOR IN-LINE ALSO)

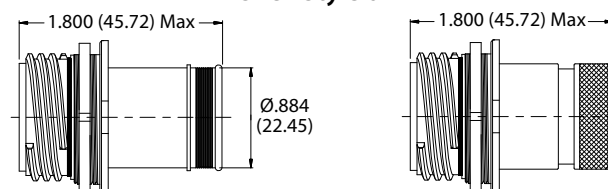
Banding Platform (S)

Boot Adapter (B)

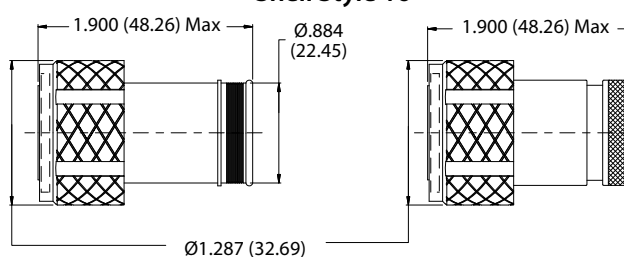
Shell Style 02, 12, 22



Shell Style 07



Shell Style 16



NOTES

1. See Section A for recommended panel cutout dimensions, additional finishes and alternate keyway positions.
2. Meets IP67 sealing requirement in unmated condition
3. Plugs are male/female and receptacles are female/female



USB 2.0 TYPE A Series 801, 804 and 805 Mighty Mouse

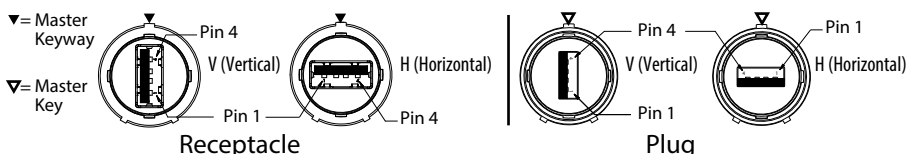


805-341 Connectors with USB Male (Plug) or Female (Receptacle) to Crimp Removable Contacts

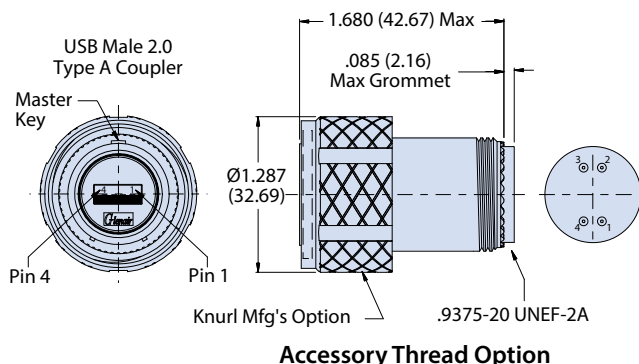
How To Order										
Sample Part Number	805-341	-	NF	07	-18	2	A	A	H	
Series	805-341									
Rear Accessory Option	- = Accessory Thread and Teeth B = Integrated Boot Adaptor S = Integrated Banding Platform									
Material and Finish ¹	NF = Aluminum/Cadmium, Olive Drab M = Aluminum/Electroless Nickel MT = Aluminum/Nickel PTFE ZNU = Aluminum/Black Zinc Nickel									
Shell Style ¹	01 = In Line Receptacle 02 = Front or Rear Panel Mount Square Flange Receptacle 12 = Rear Panel Mount Square Flange Receptacle with "Non-Locking" Clinch Nuts 22 = Rear Panel Mount Square Flange Receptacle with "Locking" Clinch Nuts 07 = Rear Panel Mount Jam Nut Receptacle 16 = Plug									
Shell Size	18 = Shell Size 18									
USB Performance	2 = USB 2.0									
USB Type	A = Type A									
Alternate Key Positions ¹	A, B, C, D, E, F									
USB Orientation	H = Horizontal V = Vertical									

USB 2.0 Wiring				
Pin	Name	Cable Color (USB)	Desc.	Recommended Wire Size (AWG)
1	(V Bus)	Red	+5 V	22
2	(D-)	White	Data -	28
3	(D+)	Green	Data +	28
4	(GND)	Black	Ground	22

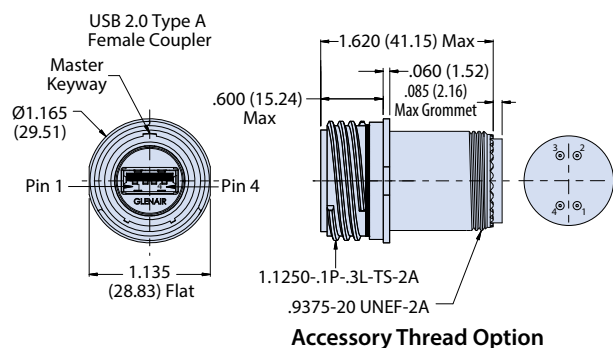
USB 2.0 ORIENTATION OPTIONS



SHELL STYLE 16 PLUG



SHELL STYLE 01 IN-LINE RECEPTACLE

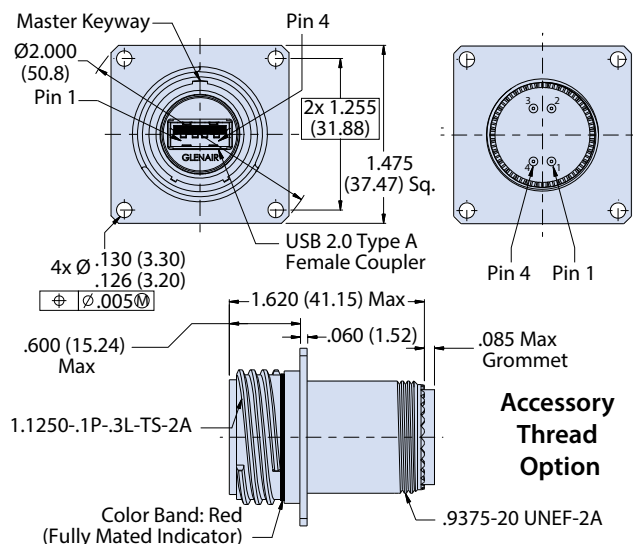




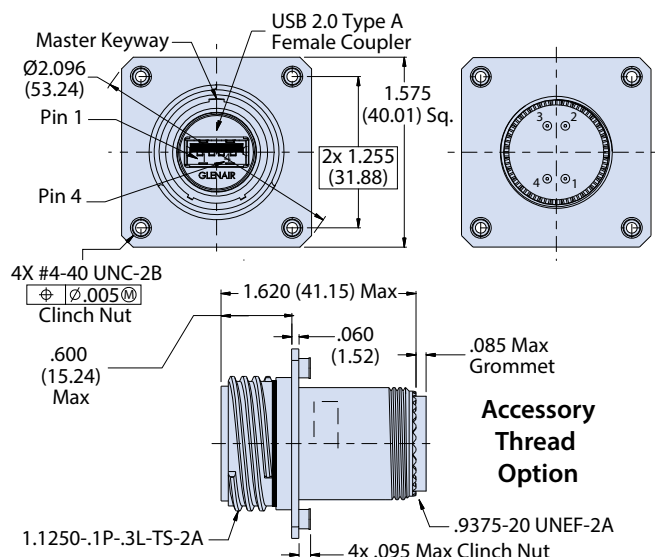
USB 2.0 TYPE A Series 801, 804 and 805 Mighty Mouse 805-341 Connectors with USB Male (Plug) or Female (Receptacle) to Crimp Removable Contacts



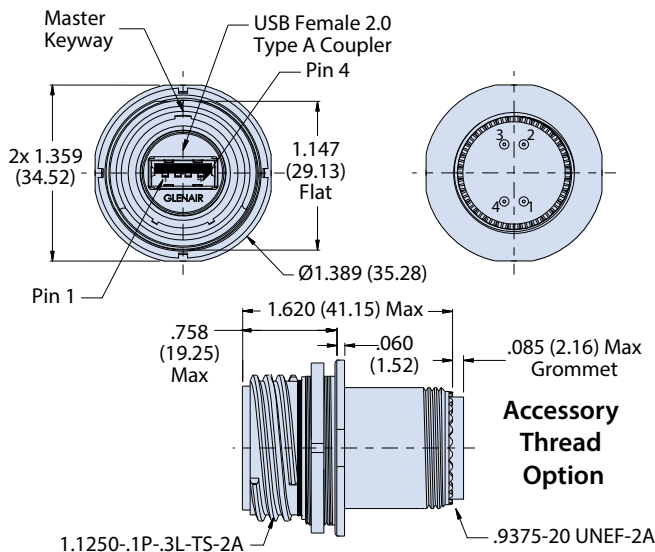
SHELL STYLE 02 FRONT OR REAR PANEL MOUNT RECEPTACLE



SHELL STYLE 12 & 22 REAR PANEL MOUNT RECEPTACLE WITH CLINCH NUTS



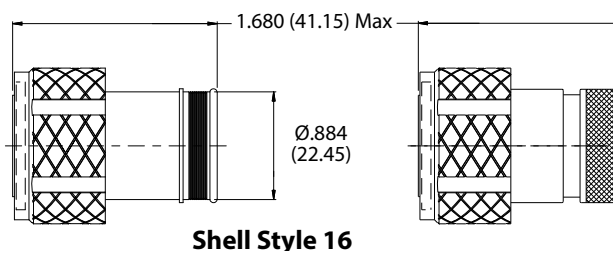
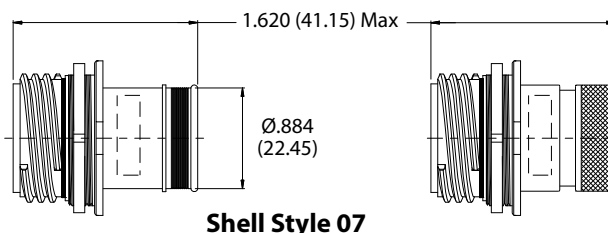
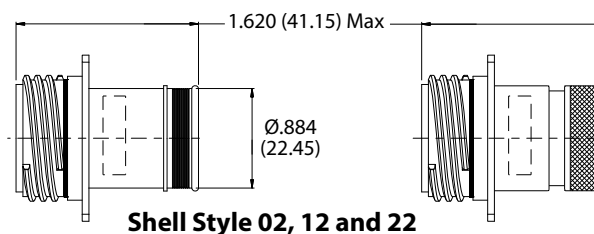
SHELL STYLE 07 REAR PANEL MOUNT JAM NUT RECEPTACLE



REAR ACCESSORY OPTIONS (AVAILABLE FOR IN-LINE ALSO)

Banding Platform (S)

Boot Adapter (B)



NOTES

1. See Section A for recommended panel cutout dimensions, additional finishes and alternate keyway positions.
2. Meets IP67 sealing requirement in unmated condition
3. Supplied with size 23 crimp socket contacts (809-002 supplied loose)



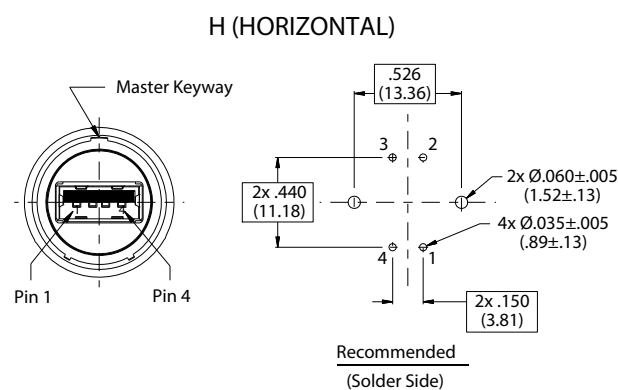
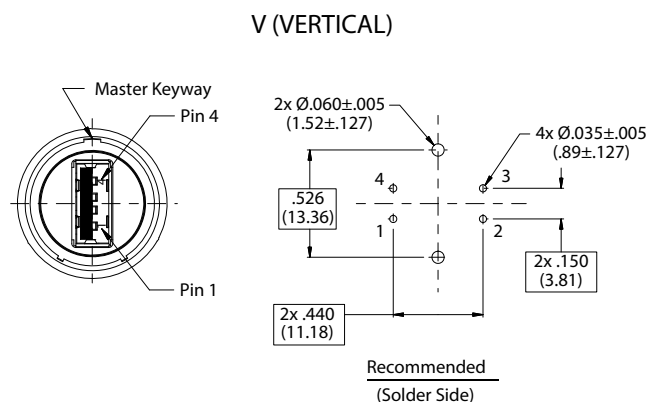
USB 2.0 TYPE A Series 801, 804 and 805 Mighty Mouse 805-342 Receptacle with USB Female Interface to PC Tail Termination



How To Order								
Sample Part Number	805-342	NF	07	-18	2	A	A	H
Series	805-342 = PC Tail							
Material and Finish ¹	NF = Aluminum/Cadmium, Olive Drab M = Aluminum/Electroless Nickel MT = Aluminum/Nickel PTFE ZNU = Aluminum/Black Zinc Nickel							
Shell Style ¹	02 = Front or Rear Panel Mount Square Flange Receptacle 12 = Rear Panel Mount Square Flange Receptacle with "Non-Locking" Clinch Nuts 22 = Rear Panel Mount Square Flange Receptacle with "Locking" Clinch Nuts 07 = Rear Panel Mount Jam Nut Receptacle							
Shell Size	18 = Shell Size 18							
USB Performance	2 = USB 2.0							
USB Type	A = Type A							
Alternate Key Positions ¹	A, B, C, D, E, F							
USB Orientation	H = Horizontal V = Vertical							

USB 2.0 Wiring				
Pin	Name	Cable Color (USB)	Description	Recommended Wire Size (AWG)
1	(V Bus)	Red	+5 V	22
2	(D-)	White	Data -	28
3	(D+)	Green	Data +	28
4	(GND)	Black	Ground	22

USB 2.0 RECEPTACLE ORIENTATION OPTIONS AND PCB FOOTPRINT (PARTIAL VIEWS SHOWN)





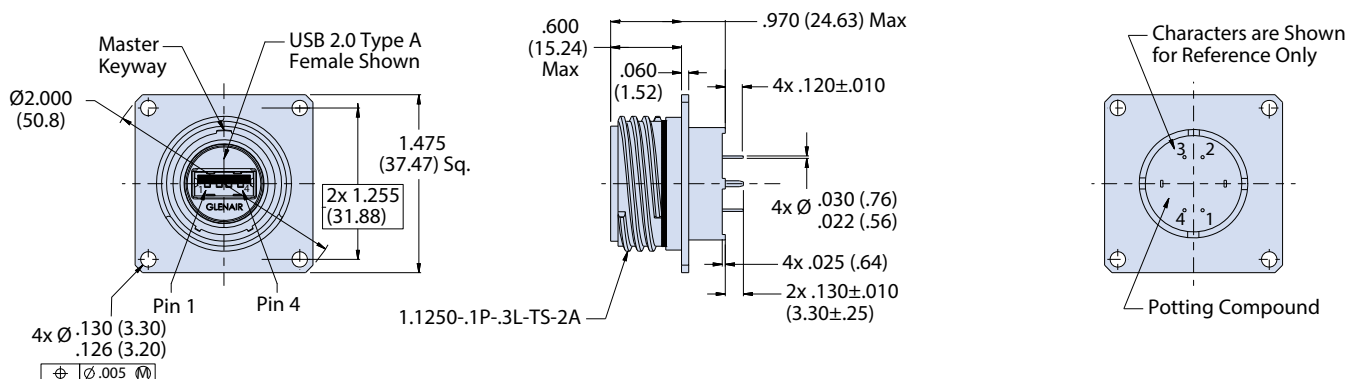
USB 2.0 TYPE A

Series 801, 804 and 805 Mighty Mouse

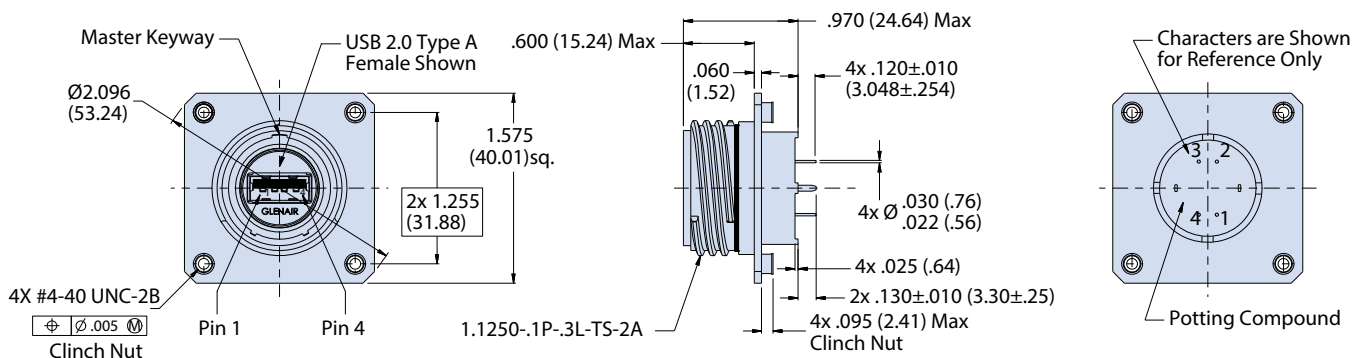


805-342 Receptacle with
USB Female Interface to PC Tail Termination

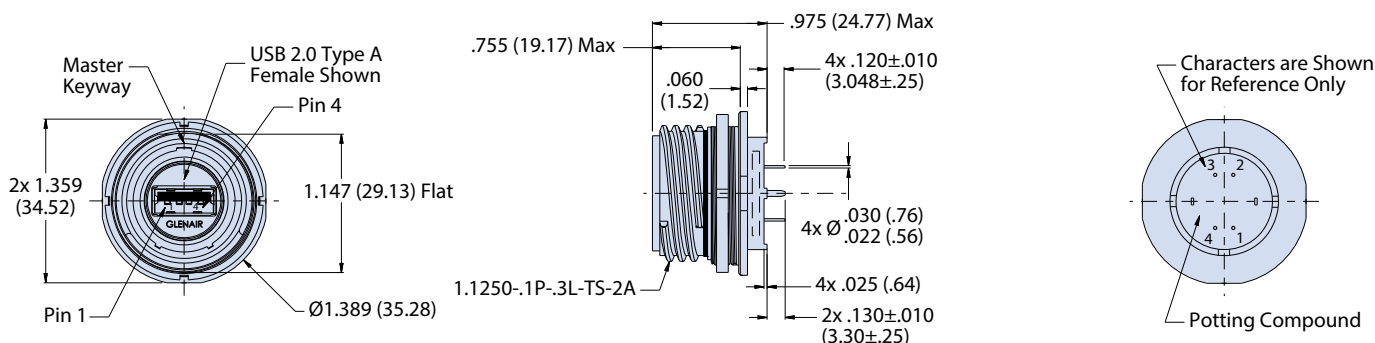
SHELL STYLE 02 FRONT OR REAR PANEL MOUNT SQUARE FLANGE RECEPTACLE



SHELL STYLE 12 AND 22 REAR PANEL MOUNT SQUARE FLANGE RECEPTACLE WITH CLINCH NUTS



SHELL STYLE 07 JAM NUT



NOTES

1. See Section A for recommended panel cutout dimensions, additional finishes and alternate keyway positions.
2. Meets IP67 sealing requirement in unmated condition
3. Material/finish
 - Shell, jam nut: al alloy or cres
 - Seal/o-ring: fluorosilicone
 - Sealant: RTV



USB 2.0 TYPE A

Series 801, 804 and 805 Mighty Mouse



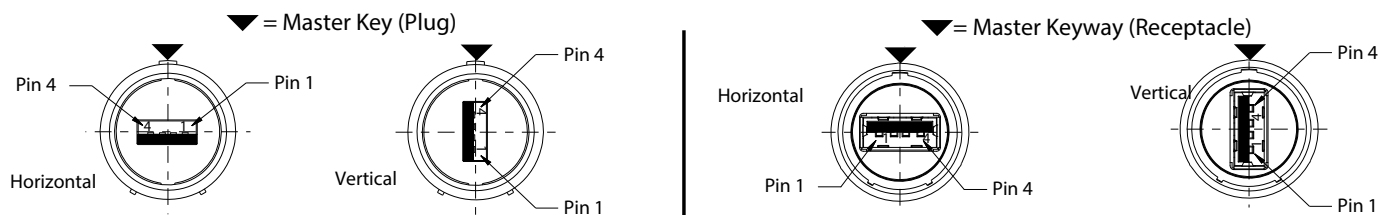
805-343 Receptacle with
USB Female Interface to Solder Cup Termination

Series 805 Triple Start

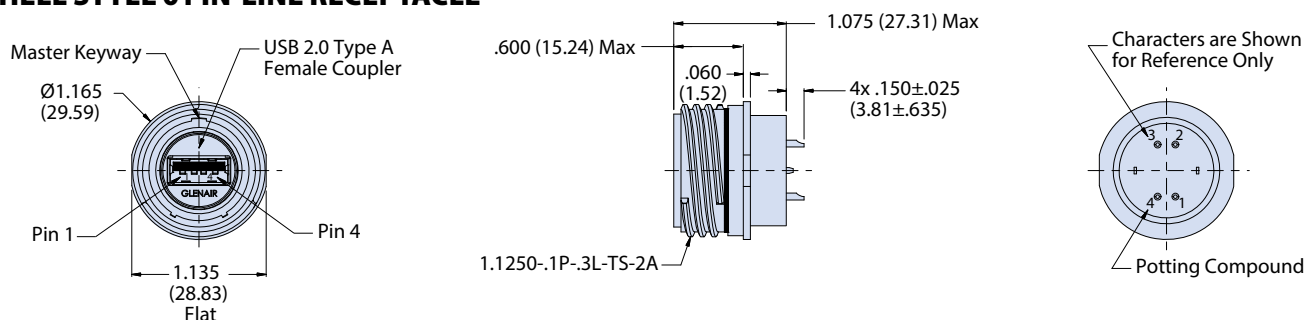
How To Order								
Sample Part Number	805-343	NF	07	-18	2	A	A	H
Series	805-343 = Solder Cup							
Material and Finish ¹	NF = Aluminum/Cadmium, Olive Drab M = Aluminum/Electroless Nickel MT = Aluminum/Nickel PTFE ZNU = Aluminum/Black Zinc Nickel							
Shell Style ¹	01 = In-line 02 = Front or Rear Panel Mount Square Flange Receptacle 12 = Rear Panel Mount Square Flange Receptacle with "Non-Locking" Clinch Nuts 22 = Rear Panel Mount Square Flange Receptacle with "Locking" Clinch Nuts 07 = Rear Panel Mount Jam Nut Receptacle							
Shell Size	18 = Shell Size 18							
USB Performance	2 = USB 2.0							
USB Type	A = Type A							
Alternate Key Positions ¹	A, B, C, D, E, F							
USB Orientation	H = Horizontal V = Vertical							

USB 2.0 Wiring				
Pin	Name	Cable Color (USB)	Description	Recommended Wire Size (AWG)
1	(V Bus)	Red	+5 V	22
2	(D-)	White	Data -	28
3	(D+)	Green	Data +	28
4	(GND)	Black	Ground	22

USB 2.0 ORIENTATION OPTIONS



SHELL STYLE 01 IN-LINE RECEPTACLE





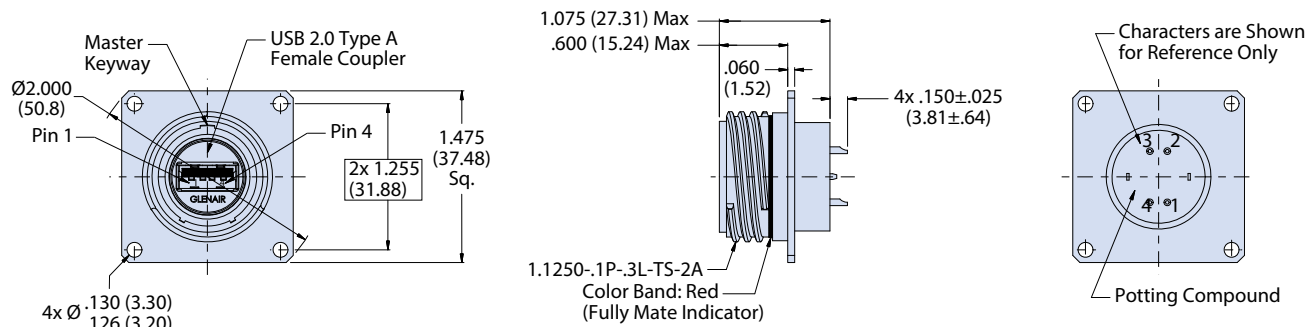
USB 2.0 TYPE A

Series 801, 804 and 805 Mighty Mouse

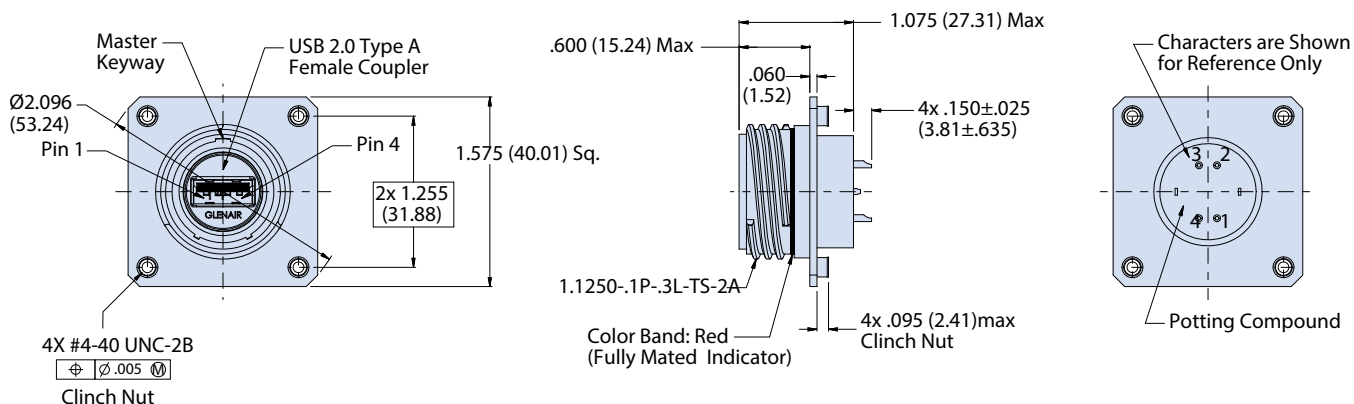


805-343 Receptacle with
USB Female Interface to Solder Cup Termination

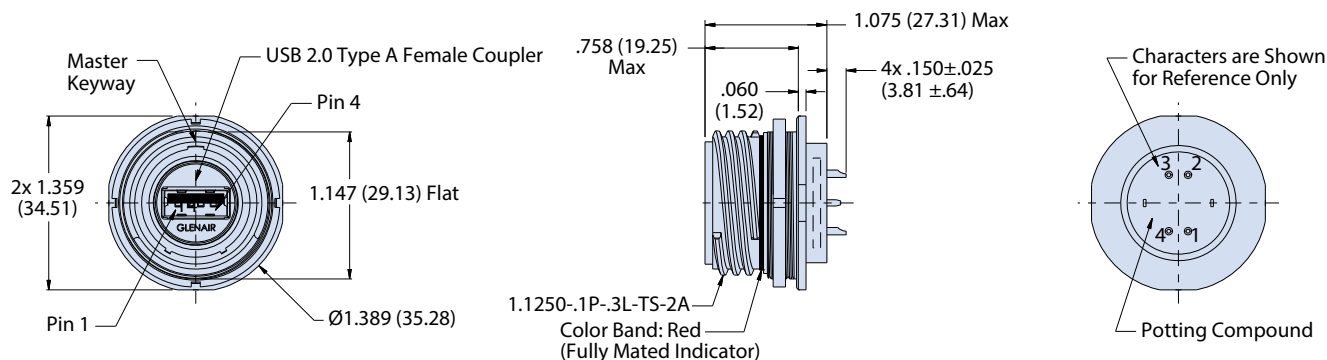
SHELL STYLE 02 FRONT OR REAR PANEL MOUNT SQUARE FLANGE RECEPTACLE



SHELL STYLE 12 AND 22 REAR PANEL MOUNT RECEPTACLE WITH CLINCH NUTS



SHELL STYLE 07 REAR PANEL MOUNT JAM NUT RECEPTACLE



NOTES

1. See Section A for recommended panel cutout dimensions, additional finishes and alternate keyway positions.
2. Meets IP67 sealing requirement in unmated condition.
3. Max solder wire diameter of .025 inches
4. Material/finish
 - Shell, jam nut: al alloy or cres
 - Seal/o-ring: fluorosilicone
 - Sealant: RTV



USB 3.2 GEN 2 TYPE C

Series 801, 804 and 805 Mighty Mouse



804-380 Connector with USB 3.2 Gen 2 Type C F-F Coupler

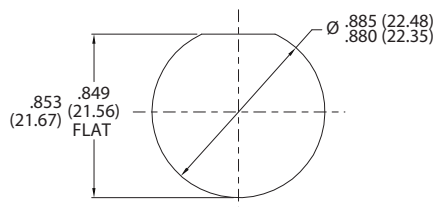
Series 804 Push/Pull

How To Order						
Sample Part Number	804-380	-	NF	01	-12	A
Series	804-380 = F-F Coupler					
Rear Accessory Option	- = Accessory Thread and Teeth S = Integrated Banding Platform B = Integrated Boot Adaptor					
Material and Finish ¹	NF = Aluminum/Cadmium, Olive Drab ME = Aluminum/Electroless Nickel MT = Aluminum/Nickel PTFE ZNU = Aluminum/Black Zinc Nickel					
Shell Style ¹	01 = In-Line Receptacle 00 = Jam-nut Receptacle for Front Panel Mounting 07 = Jam-nut Receptacle for Rear Panel Mounting					
Shell Size	-12 = Shell Size 12					
Alternate Key Positions ¹	A, B, C, D, E, F					

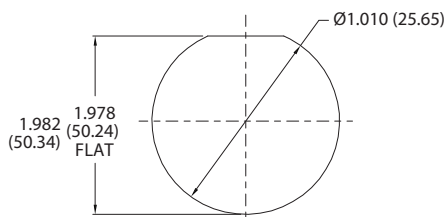
NOTES

- Interpret drawing per ASME Y14.5 - 2009.
- Material/Finishes:
 - Shell, coupling nut, jam nut - AL alloy or CRES / see Mighty Mouse Series 804 catalog
 - Seal/O-ring - fluorosilicone
 - Hardware: stainless steel
- USB Type C:
 - Housing: thermoplastic/NA
 - Shell: copper alloy/nickel plated
 - Terminal: copper alloy/gold plated
- USB 3.2 Gen 2 (Type C) specifications:
 - Electrical: D.W.V.: 100 Vac
 - I.R.: 100 Megohms min.
 - Operating temperature range: -20°C to +85°C
- Performance: design meets USB 3.2 Gen 2 (Type C) benchmark data transfer rate requirements for read and write.
- Sealing Rate: IP67 in unmated condition. IP68 in mated condition

PANEL CUTOUT DIMENSIONS



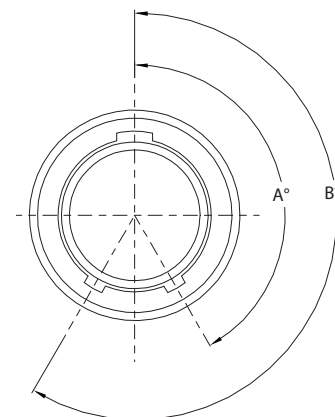
RECOMMENDED PANEL CUTOUT FOR FRONT MOUNT JAM NUT RECEPTACLE



RECOMMENDED PANEL CUTOUT FOR FRONT MOUNT JAM NUT RECEPTACLE

Alternate Key and Keyway Positions

Position	A°	B°
A	150°	210°
B	75°	210°
C	95°	230°
D	140°	275°
E	75°	275°
F	95°	210°



NORMAL AND ALTERNATE POSITION KEY ROTATION



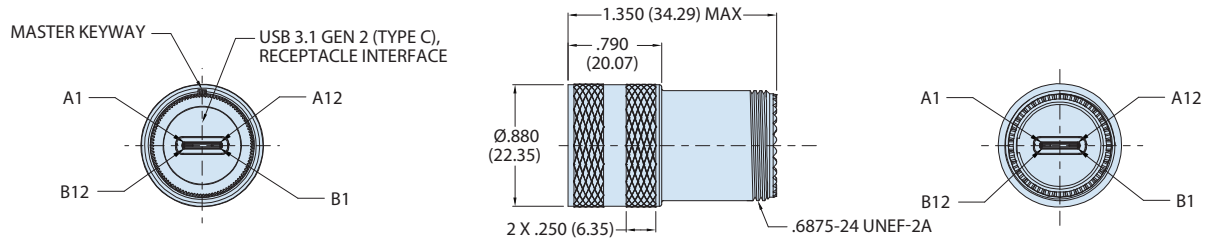
USB 3.2 GEN 2 TYPE C

Series 801, 804 and 805 Mighty Mouse

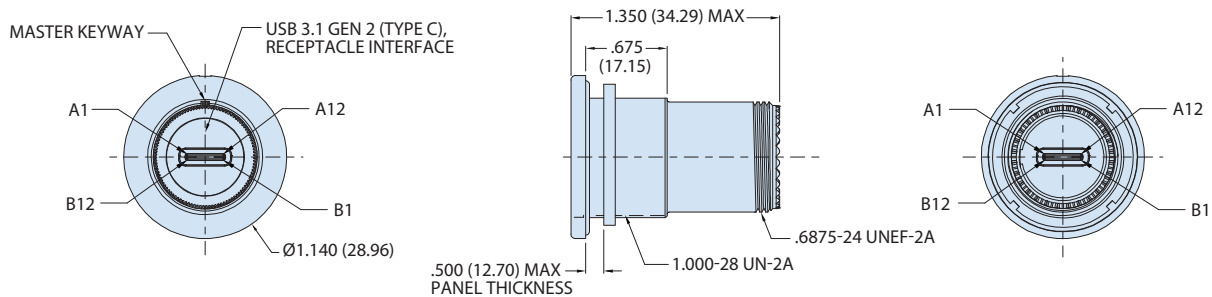


804-380 Connector with USB 3.2 Gen 2 Type C
F-F Coupler

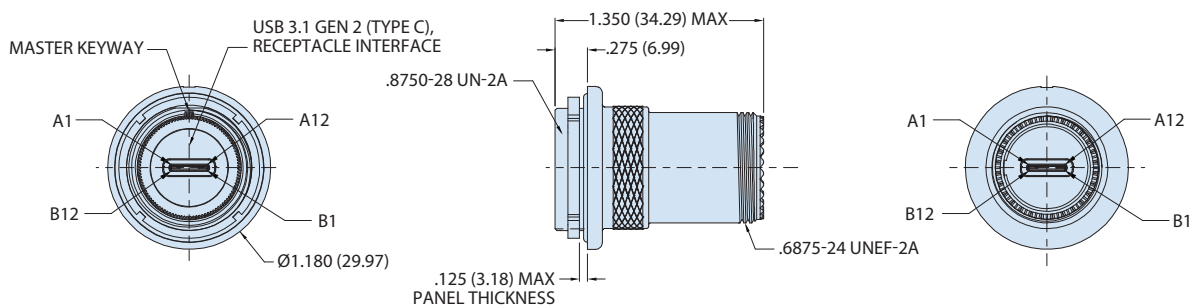
SHELL STYLE 01 INLINE RECEPTACLE



SHELL STYLE 00 JAM NUT RECEPTACLE FOR FRONT PANEL MOUNTING



SHELL STYLE 07 JAM NUT RECEPTACLE FOR REAR PANEL MOUNTING



Series 804 Push/Pull

L



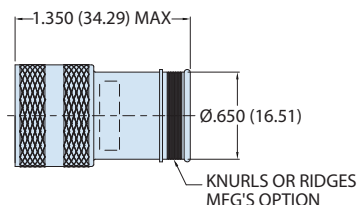
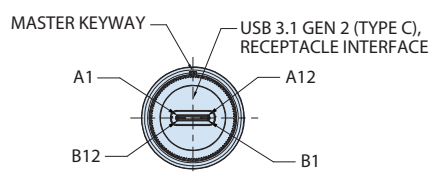
USB 3.2 GEN 2 TYPE C

Series 801, 804 and 805 Mighty Mouse

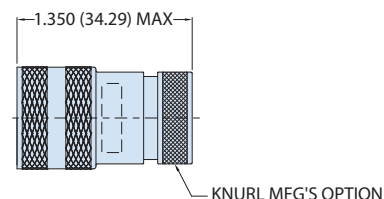


804-380 Connector with USB 3.2 Gen 2 Type C
F-F Coupler

SHELL STYLE 01 INLINE RECEPTACLE

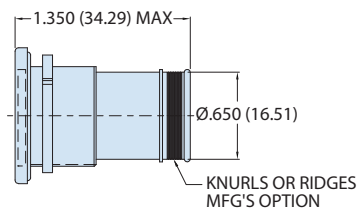
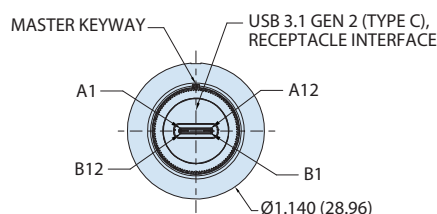


S - INTEGRATED BANDING PLATFORM

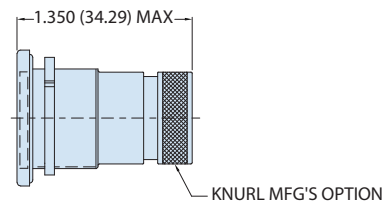


B - INTEGRATED BOOT ADAPTOR

SHELL STYLE 00 JAM NUT RECEPTACLE FOR FRONT PANEL MOUNTING

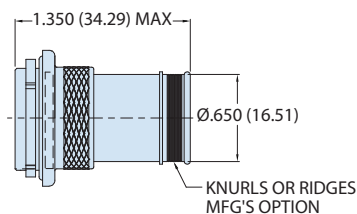
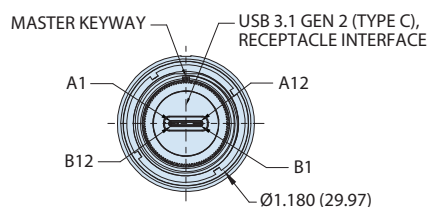


S - INTEGRATED BANDING PLATFORM

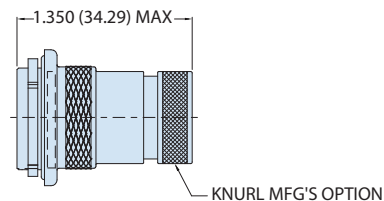


B - INTEGRATED BOOT ADAPTOR

SHELL STYLE 07 JAM NUT RECEPTACLE FOR REAR PANEL MOUNTING



S - INTEGRATED BANDING PLATFORM



B - INTEGRATED BOOT ADAPTOR



USB 3.2 GEN 2 TYPE C

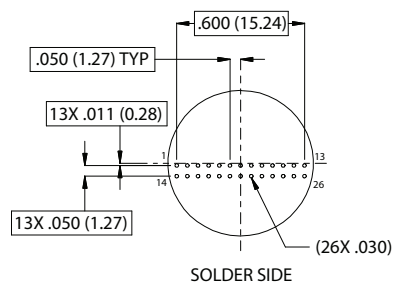
Series 801, 804 and 805 Mighty Mouse



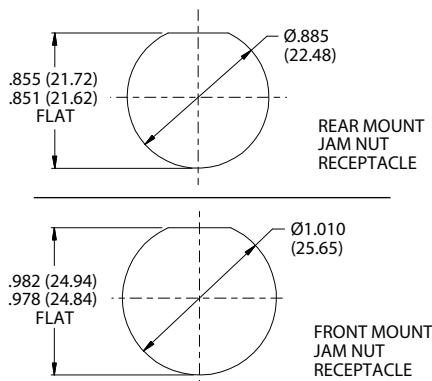
804-382 Receptacle with USB Type C Interface to Solder Cup Termination

How To Order					
Sample Part Number	804-382	NF	07	-12	A
Series	804-382 = PCB Mount				
Material and Finish ¹	NF = Aluminum/Cadmium, Olive Drab ME = Aluminum/Electroless Nickel MT = Aluminum/Nickel PTFE ZNU = Aluminum/Black Zinc Nickel				
Shell Style ¹	00 = Jam-nut Receptacle for Front Panel Mounting 07 = Jam-nut Receptacle for Rear Panel Mounting				
Shell Size	12 = Shell Size 12				
Alternate Key Positions ¹	A, B, C, D, E, F				

PCB LAYOUT



PANEL CUTOUT DIMENSIONS



Alternate Key and Keyway Positions

Position	A°	B°
A	150°	210°
B	75°	210°
C	95°	230°
D	140°	275°
E	75°	275°
F	95°	210°

NOTES

- Connector designed to meet IP67 sealing requirement unmated condition
- USB 3.2 Gen 2 (Type C) specifications:
 - Performance: design meets USB 3.2 Gen 2 (Type C) benchmark data transfer rate requirements for read and write

Electrical:

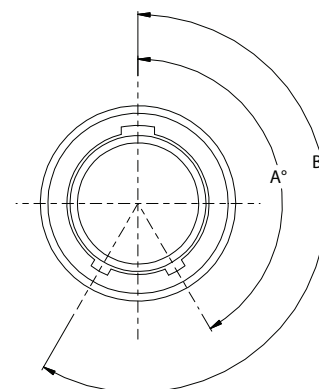
- DWV: 100 VAC
- Insulation resistance: 100 MegOhms min.
- Operating Temperature: -20° C to +85° C

3. Material/Finish:

- Shell, coupling nut, jam-nut: aluminum alloy or CRES
- Seal/O-ring: fluorosilicone
- Hardware: stainless steel

USB Type C

- Housing: thermoplastic
- Shell: copper alloy/nickel plated
- Terminal: copper alloy/gold plated



NORMAL AND ALTERNATE POSITION KEY ROTATION



USB 3.2 GEN 2 TYPE C

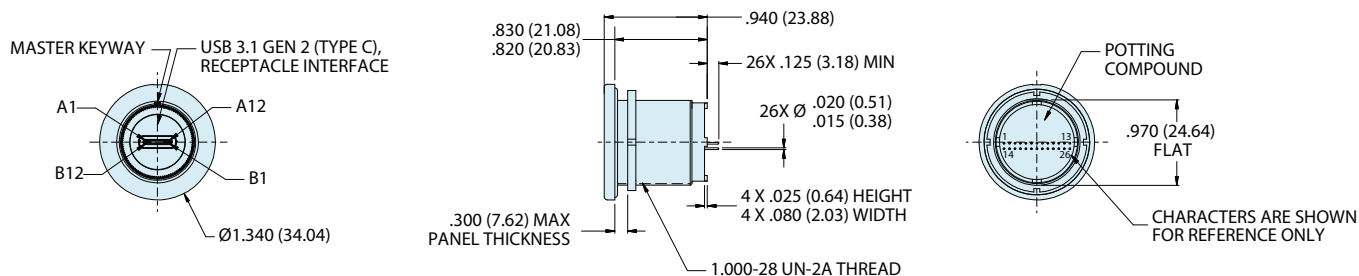
Series 801, 804 and 805 Mighty Mouse



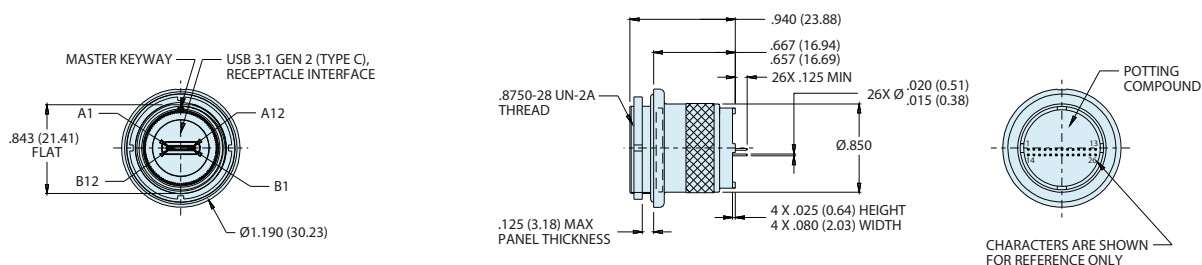
804-382 Receptacle with
USB Type C Interface to Solder Cup Termination

Series 804 Push/Pull

SHELL STYLE 00 JAM NUT RECEPTACLE FOR FRONT PANEL MOUNTING



SHELL STYLE 07 JAM NUT RECEPTACLE FOR REAR PANEL MOUNTING





USB 3.2 GEN 2 TYPE C

Series 801, 804 and 805 Mighty Mouse

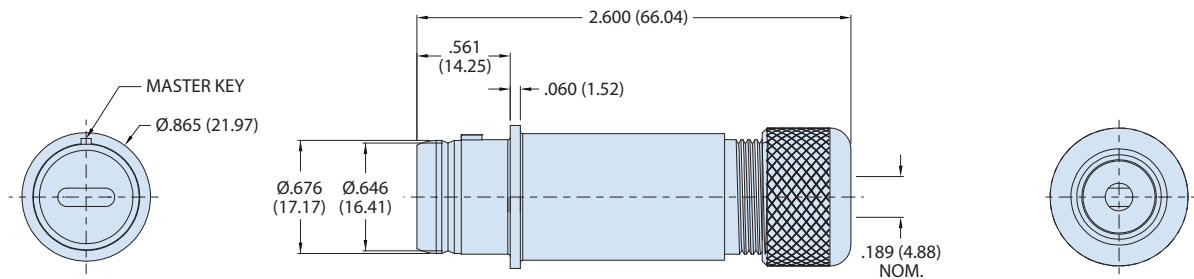
804-388 USB 3.2 Type C Plug



Series 805 Triple Start

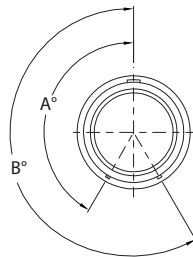
How To Order					
Sample Part Number	804-388	NF	07	-12	A
Series	804-388 = USB 3.2 Type C Plug				
Material and Finish ¹	NF = Aluminum/Cadmium, Olive Drab ME = Aluminum/Electroless Nickel MT = Aluminum/Nickel PTFE ZNU = Aluminum/Black Zinc Nickel				
Connector Style ¹	06 = Plug				
Shell Size	12 = Shell Size 12				
Alternate Key Positions ¹	A, B, C, D, E, F Omit character for single key (non-polarized)				

USB 3.2 TYPE C PLUG

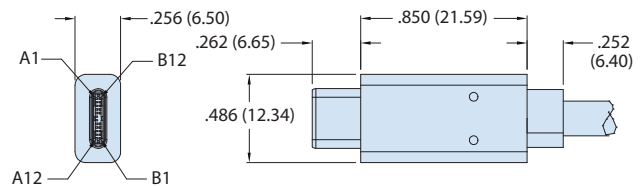


KEYWAY POSITIONS

Alternate Key and Keyway Positions		
Position	A°	B°
A	150°	210°
B	75°	210°
C	95°	230°
D	140°	275°
E	75°	275°
F	95°	210°



RECOMMENDED USB 3.2 TYPE C PLUG DESIGN



NOTES

1. Interpret drawing per ASME Y14.5 - 2009.
2. Material/finishes:
 - Barrel: AL alloy or CRES / see Mighty Mouse Series 80 catalog
 - Seals: silicone based elastomer
 - Hardware: stainless steel
3. USB 3.2 Type C:
 - Electrical: current rating: 3.0 Amp max
4. Plug connector designed to meet IP68 mated condition.
5. USB design meets USB 3.2 Type C benchmark data transfer rate requirements for read and write.

TOOLS AND
ACCESSORIES

SUPERSEAL™

Tools and Accessories for the SuperSeal™ family of connectors



Nobody can grasp the ins-and-outs of interconnect tool design and manufacturing without a full understanding of cable harness assembly. At Glenair, we not only manufacture the connectors, backshells, cables and enclosures which go into creating interconnect cable harnesses, we run a top-flight cable assembly service of our own. We've drawn on this extensive experience to design and build a complete family of specialized backshell assembly tools for most Mil-Standard circular connectors, as well as connector wrenches, universal connector holding tools and braid termination tools for production use and field maintenance.



Glenair, Inc.
1211 Air Way
Glendale, CA 91201-2497
818-247-6000
sales@glenair.com
www.glenair.com



RJ45 AND USB 2.0 Contacts, Tools, and Accessories

Product Selection Guide



Contacts and Termination Tools

Tools, Contacts and Contact Installation Instructions
Band-Master ATS Manual Banding Tools

Page M-2
Page M-6



MIL-DTL-38999 Type Accessories

Backshells and Recommended Shrink Boots
Covers

Page M-8
Page M-11

Series ITS (5015 Intermountable) Accessories

Covers

Page M-14

For backshells and Recommended Shrink Boots
see ITS300H for RJ45 or ITS340H for USB Applications



Series IPT MIL-DTL-26482 Type Accessories

Covers

Page M-15

For backshells and Recommended Shrink Boots
see IPT300H for RJ45 or IPT340H for USB applications

MIL-DTL-28840 Type Accessories

Backshells
Covers

Page M-16
Page M-18



Series 80 Mighty Mouse Accessories

Backshells and Recommended Shrink Boots
Covers

Page M-19
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RJ45 CAT 5E/6A ETHERNET

MIL-DTL-38999 Series III Type Connectors



637-235 Environmental feedthrough backshell
for RJ45 Series connectors



Part Number Development				
Sample Part Number	637-235	M	17	- 1
Basic Number	637-235 Environmental Feedthrough Backshell for RJ45 Series Connectors			
Finish	See Material and Finish table			
Shell Size	See Table I			
Cable Range	- = Standard Cable Ø .312/.187 A = Cable Ø .400/.256 B = Cable Ø .462/.400			
Length Indicator	See Table III (Omit For Standard Length)			

NOTES

- Glenair 600 series backshell assembly tools are recommended for assembly and installation.
- Material/finish:
 - Adapter, coupling nut, compression ring, split washer and nut: see Table I
 - O-ring and grommet: fluorosilicone
 - Anti-decoupling device - corrosion resistant material/na

Material and Finish ¹	
M	Aluminum/Electroless Nickel
NF	Aluminum/Cadmium, Olive Drab, over Electroless Nickel
ZN	Aluminum/ Zinc Ni, Olive Drab
ZE	
ZR	Aluminum/Black Zinc-Nickel
MT	Aluminum/Nickel PTFE
P2	Aluminum/Nickel Plate Per AMS-QQ-N-290
XM	Composite/Electroless Nickel
XMT	Composite/Nickel-PTFE
XO	Composite/No Finish
XW	Composite/Cadmium, Olive Drab, Over Electroless Nickel
Z1	Stainless Steel/Passivate
ZC	Stainless Steel/Zinc Cobalt
ZL	Stainless Steel/ Electro-Deposited Nickel
ZW	Stainless Steel/Cad Olive Drab Over Nickel
AB	Bronze/None (Clean Only)

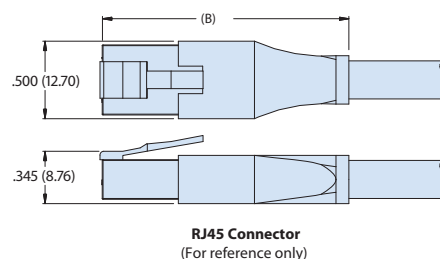
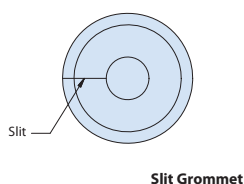
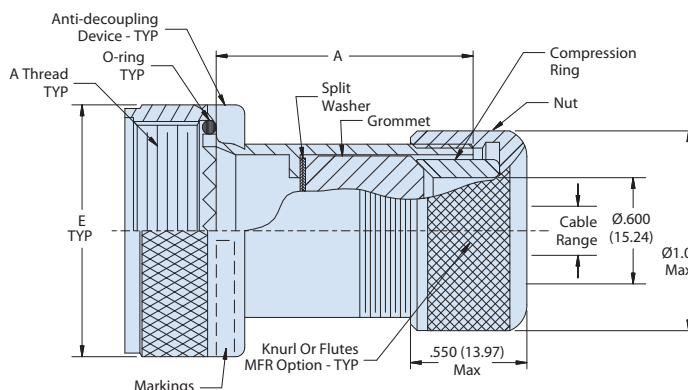


Table I			
Shell Size	A Thread	E Max	
		in	mm
17	M25 X 1.0-6H	1.42	36.1
19	M28 X 1.0-6H	1.54	39.1

Table III				
Shell Size	A		B REF	
	in	mm	in	mm
1	0.75	19.05	0.62	15.75
2	1.00	25.40	0.87	22.10
3	1.25	31.75	1.12	28.45
4	1.50	38.10	1.37	34.80
Standard Length	1.74	44.20	1.62	41.15



RJ45 AND USB 2.0

Contacts, Tools, and Accessories

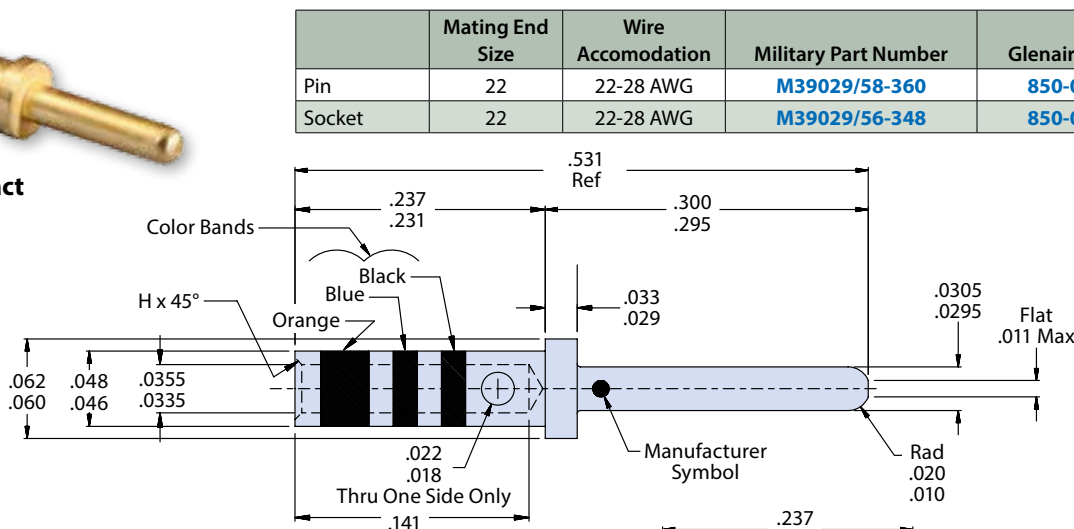


Pin and Socket Contacts for SuperSeal™ 38999 Type, Series ITS and Series IPT Connectors

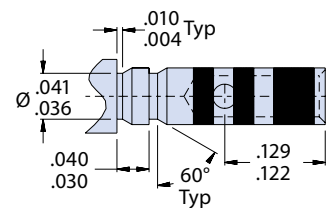
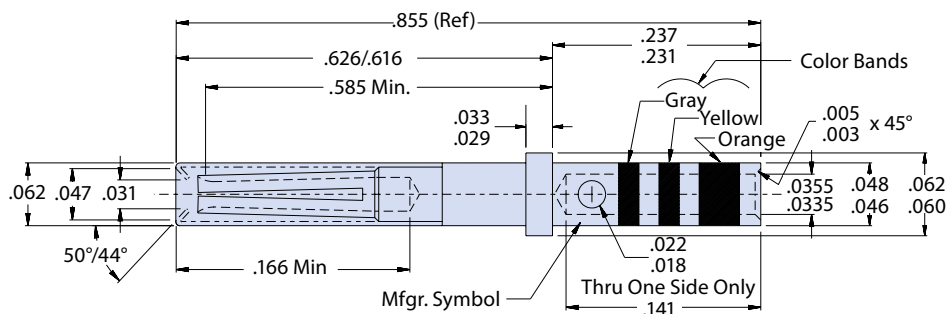
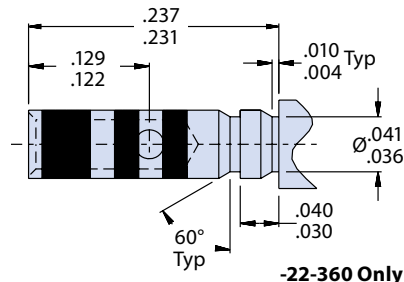
SIZE #22 STANDARD DUTY ELECTRICAL PIN AND SOCKET CONTACTS FOR USE WITH SUPERSEAL™ 38999 TYPE, ITS 301, ITS 345, IPT 301 AND IPT 345 SERIES CONNECTORS



Pin Contact



Socket Contact



-22-348 Only

Termination Tools							
Size 22	Part Number	Military Number	AWG Handling	Crimp Tool	Positioner	Insertion Tool	Extraction Tool
Pin	850-002-22-360	M39029/58-360	22, 24, 26, 28	M22520/2-01 M22520/7-01	M22520/2-09 M22520/7-07	M81969/14-01 M81969/8-01	M81969/14-01 M81969/8-02
Socket	850-001-22-348	M39029/56-348	22, 24, 26, 28	M22520/2-01 M22520/7-01	M22520/2-07 M22520/7-05	M81969/14-01 M81969/8-01	M81969/14-01 M81969/8-02



RJ45 AND USB 2.0 Contacts, Tools, and Accessories

Size #22 Crimp Contact Instructions



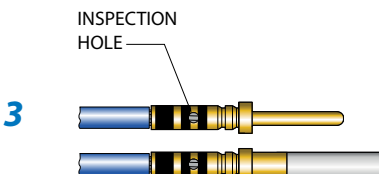
HOW TO TERMINATE, INSTALL AND REMOVE SIZE #22 CONTACTS

1 Set Up Series M22520 Crimp Tool. See pin and socket contact selection guide for correct tools based on contact part numbers and tool codes. Install proper positioner into crimp tool. The label on the positioner shows the proper tool setting for each wire size. Turn the adjustment wheel to the correct setting.



2 Strip Wire. Remove wire insulation, taking care to avoid nicking or cutting wire strands. Strip wire to length shown. Holding wire by insulation, twist strands together to form a neat bundle.

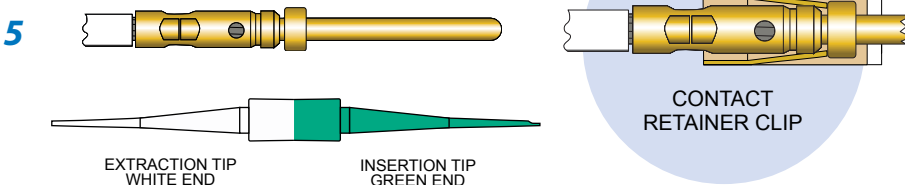
3 Insert wire into contact. The wire should be visible in the inspection hole.



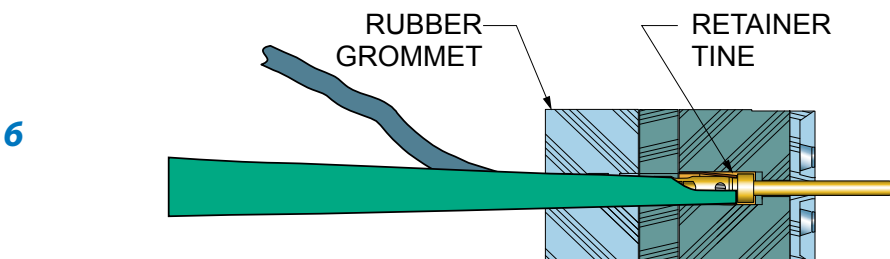
4 Insert wire and contact into crimp tool as shown. Make sure that the contact is fully inserted into the tool. Squeeze handle completely. The ratchet mechanism will not allow a partial crimp. Release handle and remove contact.



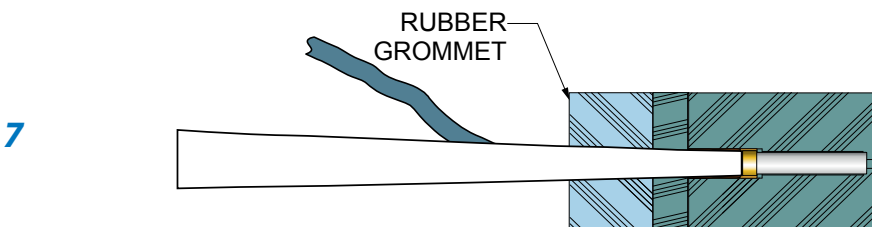
5 Inspect crimped contact. Wire should be fully inserted and the crimp should be uniform in appearance.



6 Install contact into connector. Slide green end of insertion/extraction tool over wire insulation and slide the tool forward until it bottoms against the contact shoulder. Insert tool/contact/wire into contact cavity, being careful to avoid damage by properly aligning the contact with the cavity. Push forward until contact retention clip snaps into position. Remove tool. Gently pull on wire to confirm contact retention. Fill unused contact cavities with uncrimped contacts followed by the proper MS27488 sealing plug.



7 Contact Extraction. Use the white end of appropriate insertion/extraction tool. First, push the wire into the groove of the extraction tool's tip. Slide the tip of the tool over the jacketed wire into the connector cavity. Push the tool until the tip bottoms in the connector. A straight push is best. Avoid wiggling or rocking the tip, as this may damage the cavity. Pinch the wire between your thumb and the white plastic grip and slide the tool and contact out of the connector.





RJ45 AND USB 2.0

Contacts, Tools, and Accessories



Size #23 Crimp Contact for Mighty Mouse Series 801, 804, and 805 Micro and Standard USB Connectors

SIZE #23 CRIMP CONTACTS FOR USE WITH 801-084, 801-085, 801-341, 804-084, 804-085, 804-341 805-084, 805-085 AND 805-341 SERIES 80 MIGHTY MOUSE CONNECTORS

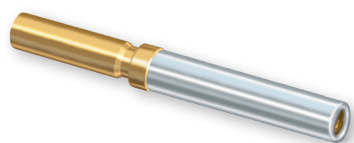


#23 Pin Contact

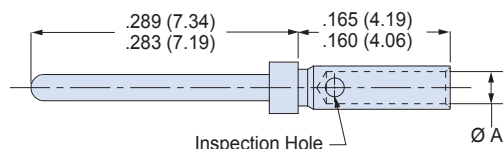
Standard size #23 contacts accept #22 to #28 AWG wire. Choose "small bore" versions for #26 to #30 AWG wire. For thermocouple applications, specify alumel or chromel contacts. Contacts are bulk packaged. Terminate with standard M22520 crimper with special positioner.

Contact Type	Wire Size	Material	Part Number	Ø A		Color Band	Tool Code
				In.	mm.		
Pin	#22 – #28	BeCu	809-001	.035 Max	.902	None	A, C
Socket	#22 – #28	BeCu	809-002	.035 Max	.902	None	A, C

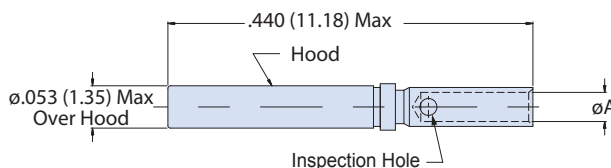
PIN (809-001)



#23 Socket Contact



Socket (809-002)



Crimp Tensile Strength		
Values are in pounds and are minimums.		
Wire Gage	Silver or Tin Coated Copper Wire	Nickel Coated Copper Wire
#22	12	8
#24	8	6
#26	5	3
#28	3	2

Material and Finish

Beryllium copper alloy per ASTM B196 or B197, 50 microinches gold plated per ASTM B 488 over nickel underplate. Crimp area may have less plating.

Thermocouple contacts: alumel or chromel alloy, unplated, per ANSI 96.1

Socket contact hood: stainless steel, passivated per AMS-QQ-P-35.

Specifications

Current Rating: 5 Amps maximum

Voltage Drop (at 5 Amps and 25° C): 70 millivolts maximum

Temperature Range: -65° to + 200° C

MINIATURE ADJUSTABLE CRIMP TOOL AND POSITIONER



Standard M22520/2-01 crimper for use with standard size #23 Mighty Mouse contacts. Performs precision eight-indent crimps for gas-tight wire terminations and excellent tensile strength. Adjustment wheel has 8 settings. Ratchet mechanism prevents improper crimps. Length is 6.75 inches, weight is approx. 10 oz. Bayonet-type positioner 809-005 hold contacts at correct height for crimping. Check calibration with M22520/3 gages.

Tool	Part Number	Military Part Number	Daniels Part Number	Tool Code
Crimp Tool	809-015	M22520/2-01	AFM8	A
Positioner	809-005	(none)	K1461	C



RJ45 AND USB 2.0

Contacts, Tools, and Accessories



Size #23 Crimp Contact Instructions for Mighty Mouse Series 801 Micro and Standard USB Connectors

HOW TO TERMINATE, INSTALL AND REMOVE SIZE #23 CONTACTS

1 Set Up Crimp Tool. Install proper positioner into crimp tool. The label on the positioner shows the proper tool setting for each wire size. Turn the adjustment wheel to the correct setting.

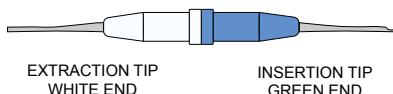
2 Strip Wire. Remove wire insulation, taking care to avoid nicking or cutting wire strands. Strip wire to length shown.

3 Insert wire into contact. The wire should be visible in the inspection hole.

4 Insert contact into crimp tool as shown. Make sure that the contact is fully inserted into the tool. Squeeze handle completely. The ratchet mechanism will not allow a partial crimp. Release handle and remove contact.

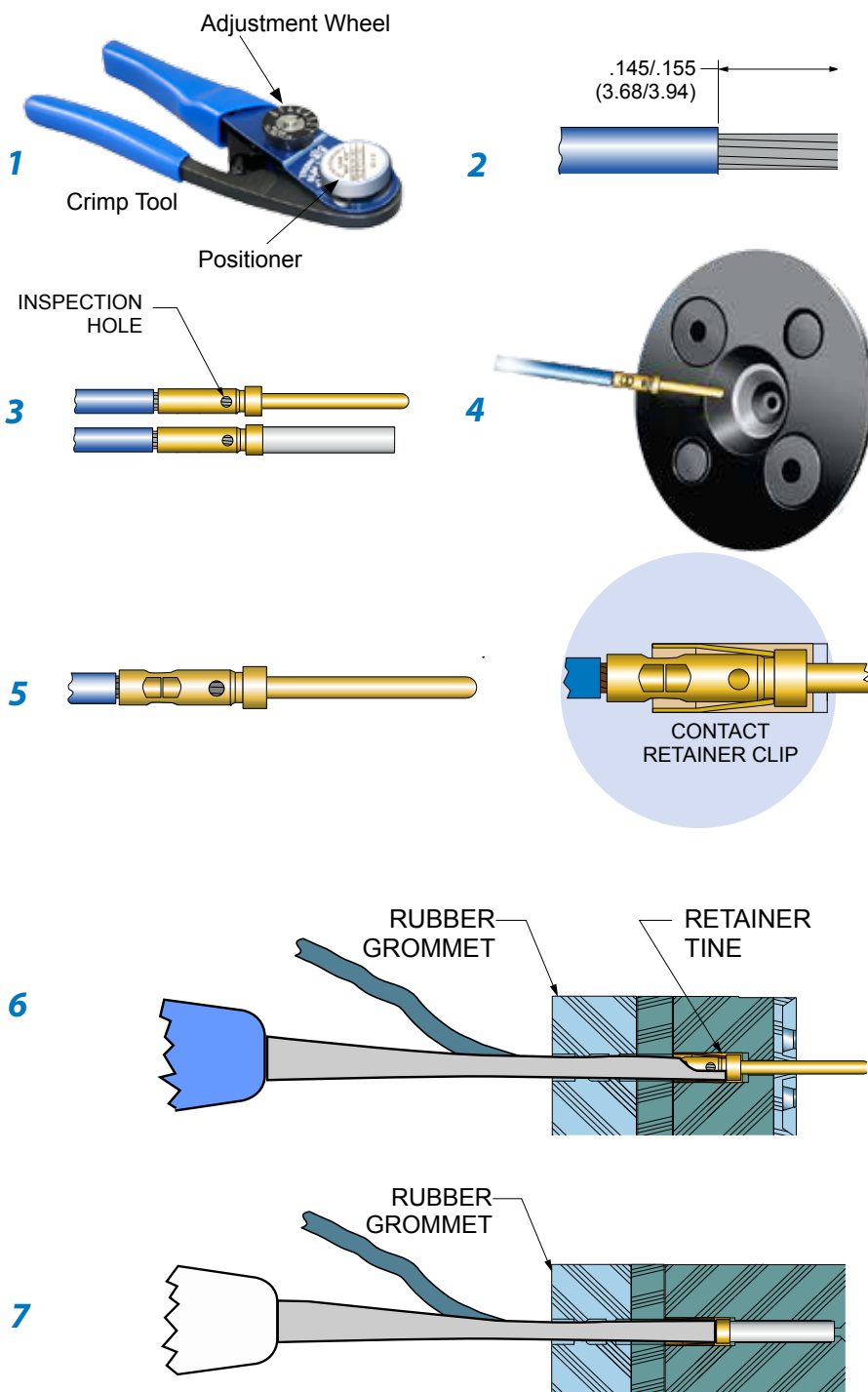
5 Inspect crimped contact. Wire should be fully inserted and the crimp should be uniform in appearance.

Insertion/Extraction Tool 809-088



6 Install contact into connector. Push the contact through the rear grommet until the contact locks into place. This can usually be done by hand without the need for a tool. If the wire gage is #26 or smaller, a tool is helpful. There are two techniques for installing contacts with a tool. One method is to push the contact in by hand, then use the tool to finish the insertion. The other method is to position the insertion tip against the contact shoulder, then insert the contact. Use insertion/extraction tool 809-088 to install contacts. Slide the wire into the groove on the blue end of the tool. Slide the tool tip up the contact until it touches the contact shoulder. **USE CARE TO AVOID DAMAGING THE CONNECTOR.**

7 Contact Extraction. Use tool 809-088. The white end is used for contact extraction. First, push the wire into the groove of the metal tip. Slide the tip of the tool into the connector. Push the tool into the connector cavity until the tip bottoms in the connector. Avoid wiggling or rocking the tip. This may damage the cavity. A straight push is best. Pinch the wire between your finger and the white plastic grip and slide the tool and contact out of the connector. **Wire insulation diameter greater than 0.045 inches (1.14mm) is too large to work properly with the extraction tool. connector damage is possible.**





RJ45 AND USB 2.0

Contacts, Tools, and Accessories



Band-Master ATS® 601-100 Commercial and 600-058
QPL Qualified, Standard Banding Tool

STANDARD BANDING TOOL



The 601-100 Band-Master ATS® Standard Tool with Counter for Standard Bands

Weighs 1.2 lbs., and is designed for .240" width clamping bands in a tension range from 100 to 180 lbs. Calibrate at 150 lbs. $\pm$ 5 lbs. for most shield terminations. Tool and band should never be lubricated.

The 600-058 QPL Qualified (M81306/1A) Standard Banding Tool without Counter



Weighs 1.1 and is designed for .240" width clamping bands in a tension range from 100 to 180 lbs. Calibrate at 150 lbs. $\pm$ 5 lbs. for most shield terminations. Tool and band should never be lubricated (not shown).

Color-coded tool handle:



= Standard; Black

Band-Master ATS® Standard Band Selection						
Bands	Length		Part Number		Fits Diameter	
	In.	mm.	Flat	Pre-Coiled	In.	mm.
Short Standard	9.0	228.6	601-005	601-006	1.0	25.4
Medium Standard	14.25	361.95	601-040	601-041	1.8	45.7
Long Standard	18.0	457.2	601-049	601-050	2.5	63.5

Cable Pull Strength for BandMaster™ ATS Standard Bands							
Name	Material Type	Band Width		Band Thickness		Calibration Setting	Cable Pull Strength
		In	mm	In	mm		
Standard	300 SS	0.240	6.10	.020	.51	150 $\pm$ 5 lbs	per AS85049/128

QPL Qualified Standard Band Selection						
Bands	Length		Mil Spec Part Number		Fits Diameter	
	in.	mm.	Flat	Pre-Coiled	in.	mm.
Standard Band	14.25	361.95	M85049/128-3	M85049/128-4	1.8	45.7

Cable Pull Strength for Standard QPL Qualified Bands							
Name	Material Type	Band Width		Band Thickness		Calibration Setting	Cable Pull Strength
		In	mm	In	mm		
Standard	300 SS	0.240	6.10	.020	.51	150 $\pm$ 5 lbs	per AS85049/128



RJ45 AND USB 2.0

Contacts, Tools, and Accessories



Band-Master ATS® 601-101 Commercial and 600-061 QPL Qualified, Micro Banding Tool

MICRO BANDING TOOL



The 601-101 Band-Master ATS® Micro Tool with Counter for Micro Bands

Weighs 1.3 lbs., and is designed for micro .120" width clamping bands in a tension range from 50 to 85 lbs. Calibrate at 80 lbs $\pm$ 3 lbs. for most shield terminations. Tool and band should never be lubricated.

The 600-061 QPL Qualified (M81306/1B) Micro Banding Tool without Counter



Weighs 1.1 and is designed for micro .120" width clamping bands in a tension range from 60 to 85 lbs. Calibrate at 80 lbs $\pm$ 5 lbs. for most shield terminations. Tool and band should never be lubricated (not shown).

Color-coded tool handle:



= Micro; Blue

Bands	Band-Master ATS® Micro Band Selection					
	Length		Part Number		Fits Diameter	
	in.	mm.	Flat	Pre-Coiled	in.	mm.
Short Micro	5.0	127.0	601-024	601-025	0.5	12.7
Medium Micro	8.125	206.38	601-060	601-061	.88	22.4
Long Micro	14.25	361.95	601-064	601-065	1.8	45.7

Cable Pull Strength for Band-Master ATS® Micro Bands							
Name	Material Type	Band Width		Band Thickness		Calibration Setting	Cable Pull Strength
		In	mm	In	mm		
Micro	300 SS	0.120	3.05	.015	.38	80 $\pm$ 5 lbs	per AS85049/128

QPL Qualified Micro Band Selection						
Bands	Length		Part Number		Fits Diameter	
	in.	mm.	Flat	Pre-Coiled	in.	mm.
Standard Micro	8.125	206.38	M85049/128-7	M85049/128-8	.88	22.4

Cable Pull Strength for Micro QPL Qualified Bands							
Name	Material Type	Band Width		Band Thickness		Calibration Setting	Cable Pull Strength
		In	mm	In	mm		
Micro	300 SS	0.120	3.05	.015	.38	80 $\pm$ 5 lbs	per AS85049/128



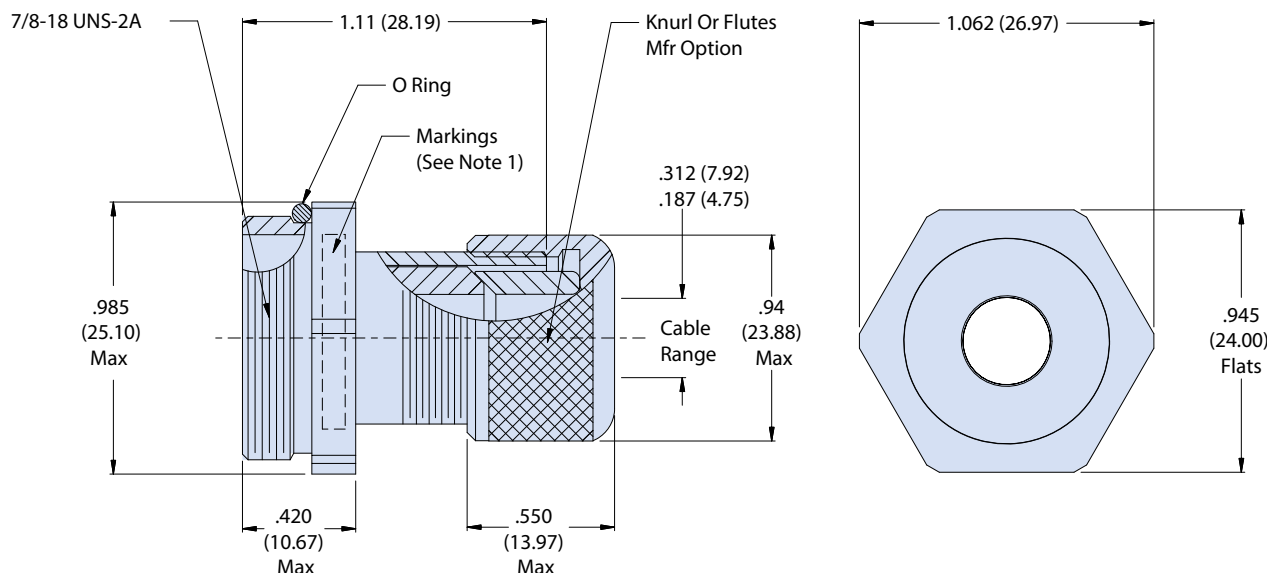
RJ45 AND USB 2.0 Contacts, Tools, and Accessories



637-204 Environmental Backshell with Sealing Gland for 253-100 RJ45 38999 Series III Type Connectors



How To Order		
Sample Part Number	637-204	M
Series	637-204	
Material and Finish	See Material and Finish Table	



Materials and Finishes	
NF	Aluminum/Cadmium, olive drab
ME	Aluminum/Electroless nickel
MT	Aluminum/ Nickel PTFE
ZR	Aluminum/ Black zinc-nickel

NOTES

- Glenair 600 series backshell assembly tools are recommended for assembly and installation
- O-ring and grommet: fluorosilicone



RJ45 AND USB 2.0

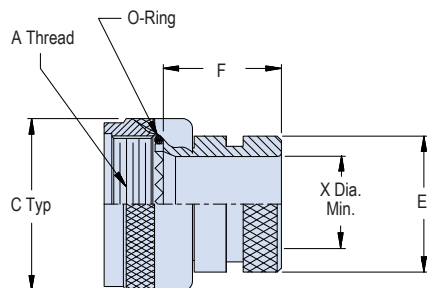
Contacts, Tools, and Accessories



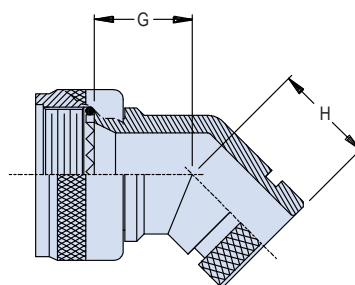
310-001 Shrink Boot Adapter with Rotatable Coupling for 38999 Series III Type Connectors



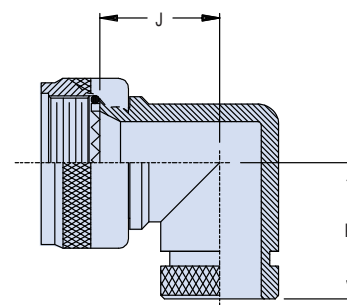
How To Order						
Sample Part Number	310	H	S	001	M	17
Series/Basic Part No.	310 - Shrink Boot Adapter					
Connector Designator	H = 38999					
Angular Function	A = 90° B = 45° S = Straight					
Basic Part No.	001					
Finish	See Material and Finish Table					
Shell Size	15, 17, 19					



Straight (S)



45° (B)



90° (A)

Dimensions									
Shell Size	A Thread	C Typ	E Max	F Max	G Max	H Max	J Max	K Max	X Dia. Min.
15	M22 X 1 -- 6H	1.07 (27.2)	.838 (21.3)	.940 (23.9)	.705 (17.9)	.890 (22.6)	.920 (23.4)	1.110 (28.2)	.565 (14.4)
17	M25 X 1 -- 6H	1.21 (30.7)	.963 (24.5)	.940 (23.9)	.732 (18.6)	.910 (23.1)	.980 (24.9)	1.170 (29.7)	.690 (17.5)
19	M28 X 1 -- 6H	1.36 (34.5)	1.042 (26.5)	.940 (23.9)	.748 (19.0)	.920 (23.4)	1.020 (25.9)	1.190 (30.2)	.769 (19.5)

Materials and Finishes		
NF	Aluminum	Cadmium, olive drab
ME		Electroless nickel
MT		Nickel PTFE
ZR		Black zinc-nickel

Recommended Shrink Boot*		
Shell Size	Shrink Boot with Low Temp Adhesive	Shrink Boot without Low Temp Adhesive
15	770-028S904 Lipless boot	770-028S904U Lipless boot
17	770-028S906	770-028S906U
19	770-028S906	770-028S906U

* Shrink Boot **MUST** be ordered separately.

Shrink boot material: compound 2013 low temperature polyolefin.



RJ45 AND USB 2.0

Contacts, Tools, and Accessories

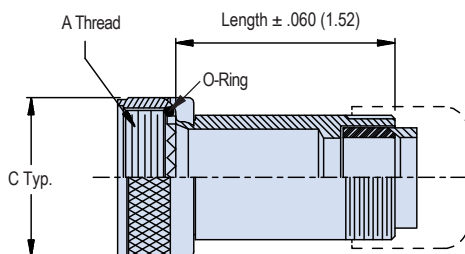


370-001 Cable Sealing Backshell with Rotatable Coupling for 38999 Series III Type Connectors

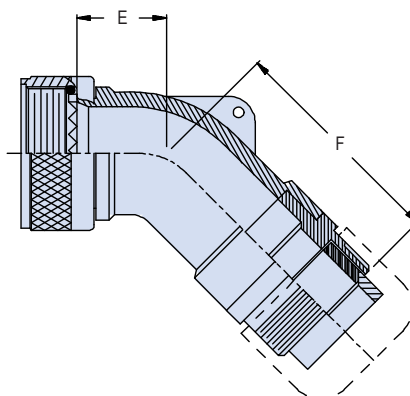
MIL-DTL-38999 Type

How To Order									
Sample Part Number	370	H	S	001	M	17	03	D	1.5
Series/Basic Part No.	370 - low Profile								
Connector Designator	H = 38999								
Angular Function	A = 90° B = 45° S = Straight								
Basic Part No.	001								
Finish	See Material and Finish Table								
Shell Size	15, 17, 19								
Dash No.	See Dash Number Table								
Strain Relief Style	D = Nut								
Length	1/2 inch increments (e.g. 6 = 3 inches); Straight only Minimum Order Length 1.5 Inch (See Note 1)								

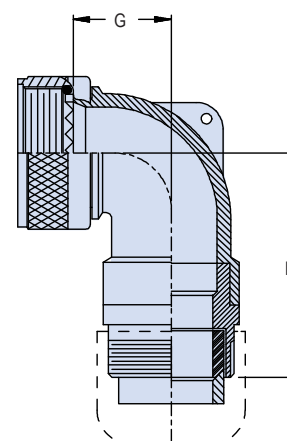
Straight (S)



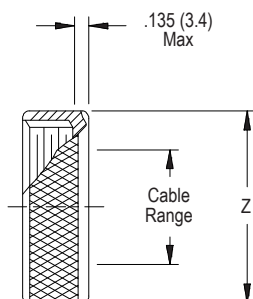
45° (B)



90° (A)



STRAIN RELIEF STYLE D



Dimensions						
Shell Size	A Thread	C Typ.	E Max	F Max	G Max	H Max
15	M22 X 1 -- 6H	1.07 (27.2)	.645 (16.4)	2.359 (59.9)	.700 (17.8)	2.369 (60.2)
17	M25 X 1 -- 6H	1.21 (30.7)	.738 (18.7)	2.469 (62.7)	.885 (22.5)	2.459 (62.5)
19	M28 X 1 -- 6H	1.36 (34.5)	.926 (23.5)	2.659 (67.5)	.975 (24.8)	2.629 (66.8)

Materials and Finishes ¹	
NF	Aluminum/Cadmium, olive drab
ME	Aluminum/Electroless nickel
MT	Aluminum/ Nickel PTFE
ZR	Aluminum/ Black zinc-nickel

Dash Number			
Dash No.	Z Max	Cable Range	
		Min	Max
03	.630 (16.0)	.156 (4.0)	.250 (6.4)
04	.755 (19.2)	.188 (4.8)	.312 (7.9)
06	.942 (23.9)	.281 (7.1)	.438 (11.1)



RJ45 AND USB 2.0

Contacts, Tools, and Accessories



660-024 and -023 Protective Covers, Attached to Panel for 38999 Type Receptacle Connectors

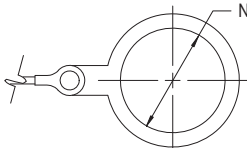
How To Order							
Sample Part Number	660	-024	M	17	H	5	-01
Series	660 = Series 66						
Cover Type	-024 = metal receptacle cover -023 = metal plug cover						
Material and Finish	See Material and Finish Table						
Shell Size	15, 17, 19						
Lanyard Type	D, S, F, G, H, K, R, T, U (See Lanyard Type Table)						
Lanyard Length	Length in inches						
Ring Style Dash No.	(See Table I and II) omit for "SK" slip knot attachment						

Table I: Dash No. for Small Ring			
Dash No.	P	Dash No.	P
01	.140 (3.6)	06	.125 (3.2)
02	.182 (4.6)	07	.218 (5.5)
03	.191 (4.9)	09	.156 (4.0)
04	.197 (5.0)	00	no eyelet
05	.167 (4.2)	WS	with strap



For attachment to panel

Table II: Dash No. for Solid Ring		
Dash No.	Shell Size	N
19	15	1.141 (29.0)
21	17	1.266 (32.2)
23	19	1.391 (35.3)

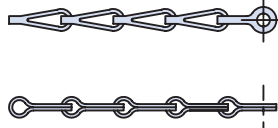
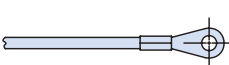


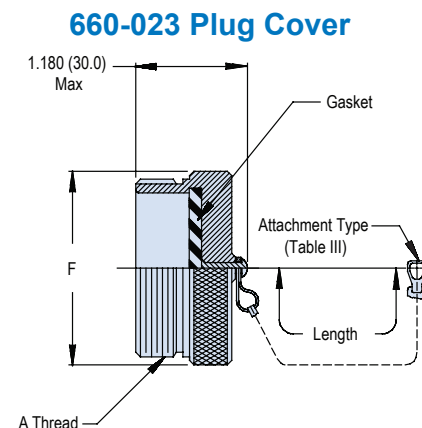
SOLID RING (with tab)

For attachment behind jam nut

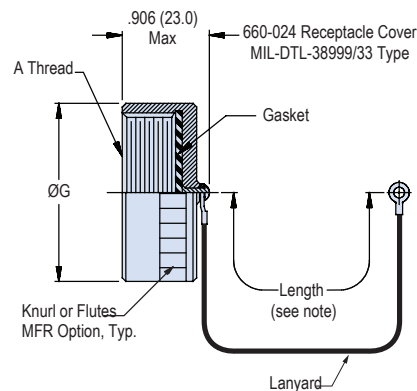
Dimensions			
Shell Size	A Thread	F	ØG Max
15	0.1P-0.3L-TS		
17	1.0000	1.300 (33.0)	1.260 (32.0)
19	1.1875	1.457 (37.0)	1.457 (37.0)
	1.2500	1.575 (40.0)	1.535 (39.0)

Lanyard Type	
Sym	Attachment
D	Bead chain, cres, passivated, with terminal
E	Link chain, cres, passivated, with clevis terminal
F	Wire rope, nylon jacket w/terminal
G	Nylon rope
H	Wire rope, fluoropolymer jacket with terminal
K	Nylon rope (olive drab color)
N	Attachment omitted
R	Wire rope, pvc jacket w/terminal
T	Wire rope, no jacket, w/terminal
S	#8 Sash chain, cres, passivate
U	Wire rope, polyurethane jacket with terminal
SK	Nylon rope (black) with slip knot

Lanyard Types		
		
Bead Chain (Type D)	Sash Chain (Type S)	Rope (Types F, G, H, K, R, T, U)



660-024 Receptacle Cover



NOTES

- Length tolerance for Sash Chain (S) is ± 1 link, for all other attachments $\pm .25$.
- For plug covers contact factory
- Material and Finish
 - Gasket: Silicone
 - Hardware, Rivet: Stainless Steel/Passivate

Materials and Finishes ¹	
NF	Aluminum/Cadmium, olive drab
ME	Aluminum/Electroless nickel
MT	Aluminum/ Nickel PTFE
ZR	Aluminum/ Black zinc-nickel
ZI	Stainless Steel/ Passivate

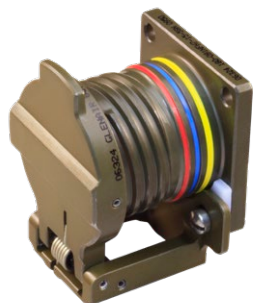


RJ45 AND USB 2.0

Contacts, Tools, and Accessories



667-407 ProSeal™ Spring-Loaded Environmental Cover for 38999 Sr. III Type Wall Mount or Jam Nut Connectors

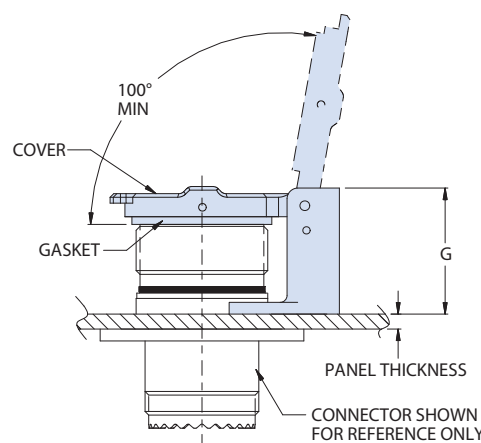
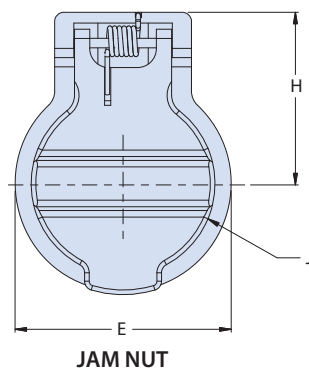
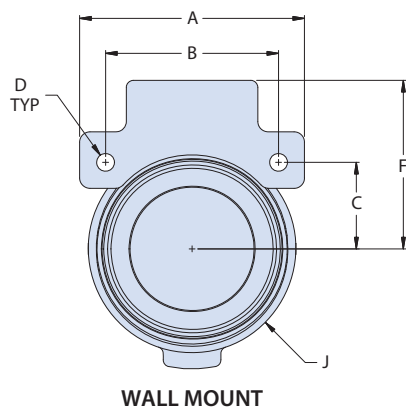


How To Order						
Sample Part Number	667-407	NF	17	T1	J	-59
Product Series-Basic No.	667-407 = Flop Cover					
Material and Finish	See Material and Finish Table					
Connector Shell Size	See Dimensions Table					
Panel Thickness	See Panel Thickness Table					
Mounting Type	J = Jam Nut Mount Receptacle W = Wall Mount Receptacle					
Conductive Silicone	59					

Dimensions																
Shell Size	A Dim ±.031 (.78)		B Dim		C Dim		D Dim ±.008 (.20)		E Dia ±.031 (.78)		F Dim Max		H Dim Max		J Dia Max	
	In	mm	In	mm	In	mm	In	mm	In	mm	In	mm	In	mm	In	mm
15	1.220	30.98	.969	24.61	.485	12.31	.129	3.28	1.560	39.62	1.029	26.14	1.179	29.95	1.255	31.88
17	1.311	33.30	1.062	26.97	.531	13.49	.129	3.28	1.625	41.28	1.114	28.30	1.212	30.78	1.425	36.20
19	1.437	36.50	1.156	29.36	.578	14.68	.129	3.28	1.750	44.45	1.146	29.11	1.365	34.67	1.488	37.80

Material and Finish		
Symbol	Material	Finish Description
MT	Aluminum	Nickel-PTFE
ZR		Zinc ni, black (tri-valet cr)
M		electroless nickel
NF		cadmium plate/olive drab over electroless nickel
Z1	SST	passivate
XB	Composite	color black

Panel Thickness Table							
Dash No.	Panel Thickness ±.030		Shell Size	G ±.06 (1.52)			
	In	mm		Jam Nut Style		Wall Style	
				In	mm	In	mm
T1	.062	1.57	09-19	1.041	26.44	0.977	24.82
			21-25	1.126	28.60	1.032	26.21
T2	.125	3.18	09-19	0.979	24.87	0.915	23.24
			21-25	1.064	27.03	0.970	24.64



NOTES

- Cover will stay open at 100° from receptacle face



RJ45 AND USB 2.0

Contacts, Tools, and Accessories

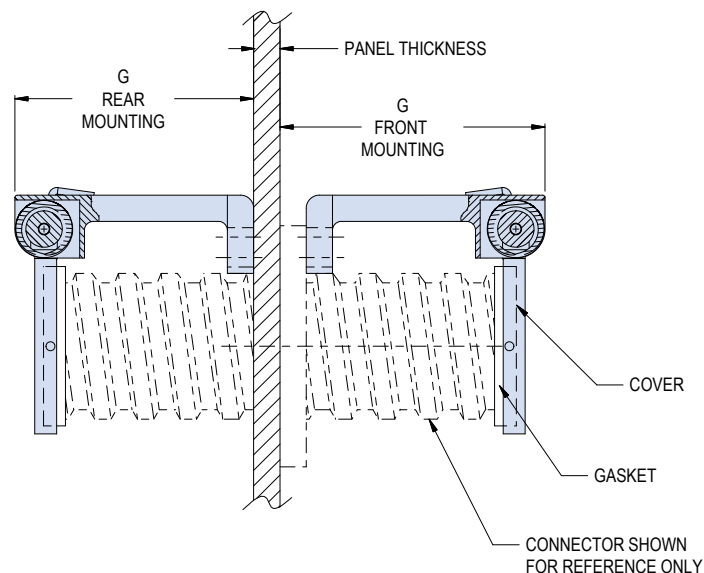
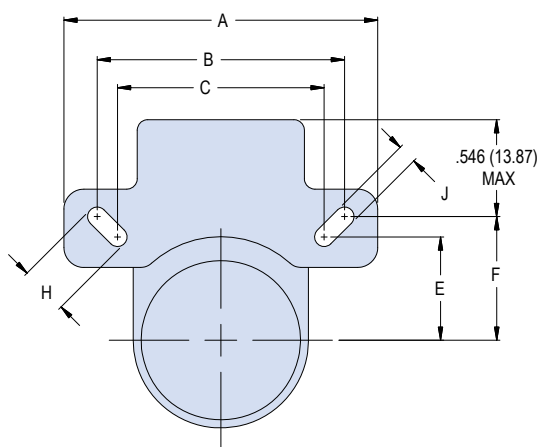


667-398 Spring Loaded Flop-Lid Cover for 38999 Series III Type Feed Thru Connector

How To Order				
Sample Part Number	667-398	NF	17	FO
Product Series-Basic No.	667-398 = Flop Cover			
Material and Finish	See Material and Finish Table			
Connector Shell Size	See Dimensions Table			
Cover Mounting	FO = Front Mounting R1, R2, R3, R4 = Rear Mounting See Table I for Panel Thickness Guidelines			

Shell Size	Dimensions													
	A Dim ±.012 (.31)		B Dim		C Dim		E Dim		F Dim		H Dim ±.008 (.20)		J Dim ±.008 (.20)	
	In	mm	In	mm	In	mm	In	mm	In	mm	In	mm	In	mm
17	1.542	39.17	1.062	26.97	.969	24.61	.485	12.32	.531	13.49	.194	4.93	.128	3.25
19	1.636	41.55	1.156	29.36	1.062	26.97	.531	13.49	.578	14.68	.194	4.93	.128	3.25

contact factory for other shell sizes



Material and Finish		
Symbol	Material	Finish Description
MT	Aluminum	Nickel-PTFE
ZR		Zinc ni, black (tri-valet cr)
M		electroless nickel
NF		cadmium plate/olive drab over electroless nickel
Z1	SST	passivate
XB	Composite	color black

Cover Mounting Dash Number		
Dash No.	Panel Thickness ±.030	G Max
FO	N/A	.845 (21.46)
R1	.062 (1.57)	.981 (24.91)
R2	.125 (3.18)	.918 (23.32)
R3	.188 (4.78)	.855 (21.72)
R4	.250 (6.35)	.793 (20.14)



RJ45 AND USB 2.0 Contacts, Tools, and Accessories

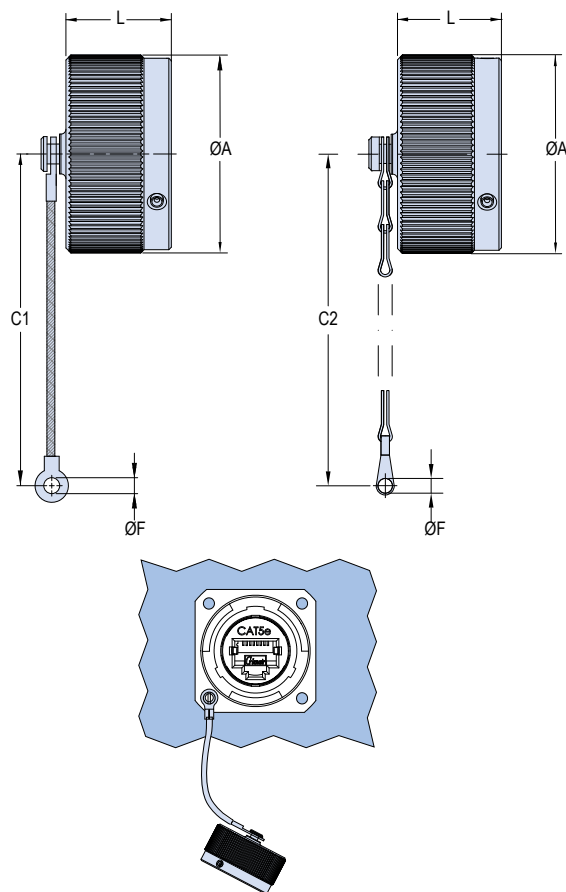


Series ITS Protective Covers for Wall Mount and Jam Nut Receptacle Connectors

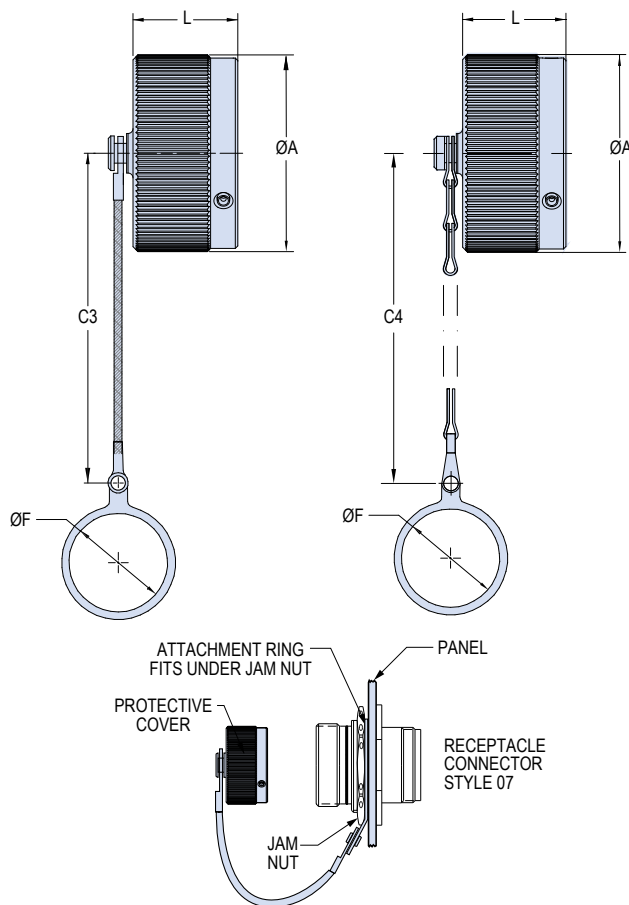
Series ITS (5015 Intermountable)

How To Order				
Sample Part Number	ITB02	TF	-17	F6
Series/Basic Part No.	ITB02 = Wall Mount Attachment Style		ITB07 = Jam Nut Attachment Style (See Note 1)	
Attachment Type	TF = Stainless Steel Wire Rope		T = Sash Chain	
Connector Size	17 = Shell Size 16		18 = Shell Size 18	
Material/Finish Options	F6 = Aluminum/Black Polymer Electrocoat F11 = Aluminum/Electroless Nickel		F7 = Aluminum/Conductive Black Zinc Nickel Omit for Aluminum/Cadmium, Olive Drab	

ITS (ITB02) WALL MOUNT RECEPTACLE COVER



ITS (ITB07) JAM NUT MOUNT RECEPTACLE COVER



Dimensions								
Shell Size Code	Connector Size	ØA ±.020 (±0.5)	Wall Mount		Jam Nut		ØF +.007 (+0.2) -.003 (-0.1)	L Max.
			Wire Rope C1 Min.	Sash Chain C2 Min.	Wire Rope C3 Min.	Sash Chain C4 Min.		
-17	16	1.26 (32.0)	7.60 (193)	4.84 (123)	8.19 (208)	5.39 (137)	.170 (4.3)	.83 (21.0)
-18	18	1.44 (36.5)	7.60 (193)	4.84 (123)	8.19 (208)	5.43 (138)	.17 (4.3)	.85 (21.7)

NOTES

1. For plug covers contact factory



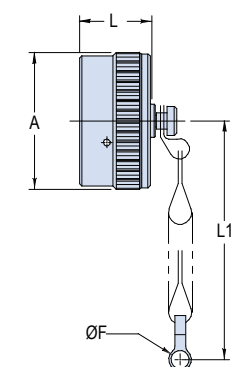
RJ45 AND USB 2.0 Contacts, Tools, and Accessories



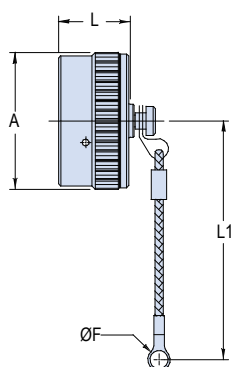
Series IPT Protective Covers for Wall Mount and Jam Nut Receptacle Connectors

How To Order				
Sample Part Number	IPT3181 -18 CF F6			
Series/Basic Part No.	IPT3181 = Receptacle Cover (See Note 1)			
Connector Size	16 = Shell Size 16 18 = Shell Size 18			
Lanyard Style	Wall Mount C = Sash Chain CF = Nylon Cord Z1C = Nylon Cord with Loose Terminal and Sleeve Jam Nut Mount N = Sash Chain NF = Nylon Cord			
Finish Options	F6 = Aluminum/Black Polymer Electrocoat F11 = Aluminum/Electroless Nickel F7 = Aluminum/Conductive Black Zinc Nickel Omit for Aluminum/Cadmium, Olive Drab			

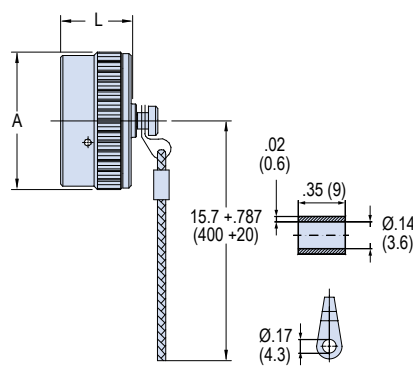
IPT WALL MOUNT RECEPTACLE COVER



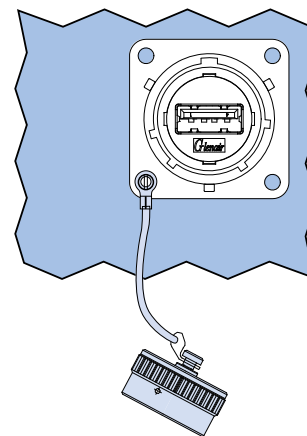
Example: IPT3181-18C
(Stainless Steel Sash Chain)



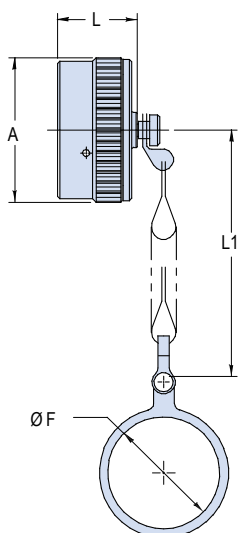
Example: IPT3181-18CF
(Nylon Cord)



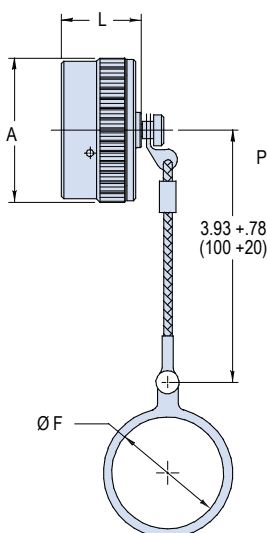
Example: IPT3181-18Z1C
(Nylon Cord with loose terminal and sleeve)



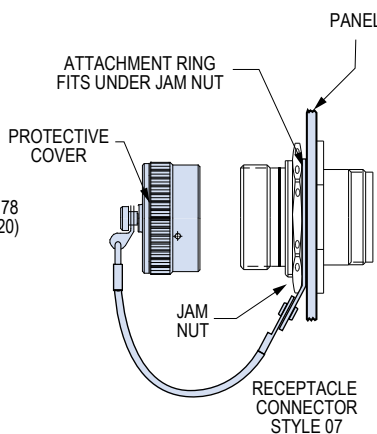
IPT JAM NUT MOUNT RECEPTACLE COVER



Example: IPT3181-18N
(Stainless Steel Sash Chain)



Example: IPT3181-18NF
(Nylon Cord)



Dimensions for Wall Mount and Jam Nut Covers				
Shell Size	A Max.	ØF +.874 (+0.2) -.004 (-0.1)	L +.197 (+0.5) -0 (-0)	L1 Min.
16	1.256 (31.90)	.169 (4.3)	.563 (14.30)	3.5 (88.9)
18	1.378 (35.00)	.169 (4.3)	.563 (14.30)	3.5 (88.9)

NOTES

- For plug covers contact factory



RJ45 AND USB 2.0

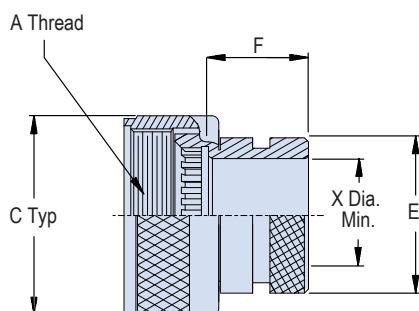
Contacts, Tools, and Accessories



310-001 Shrink Boot Adapter with Rotatable Coupling for 28840 Type Connectors



How To Order						
Sample Part Number	310	G	S	001	M	17
Series/Basic Part No.	310 - Shrink Boot Adapter					
Connector Designator	G = 28840					
Angular Function	S = Straight For 45° and 90° versions contact factory					
Basic Part No.	001					
Finish	See Material and Finish Table					
Shell Size	15, 17, 19					



Materials and Finishes	
NF	Aluminum/ Cadmium olive drab
M	Aluminum/ Electroless nickel
MT	Aluminum/ Nickel PTFE
ZR	Aluminum/ Zinc-nickel black
Z1	Stainless Steel/ Passivate

Dimensions					
Shell Size	A Thread	C Typ	E Max	F Max	X Dia. Min.
15	M22 X 1 -- 6H	1.07 (27.2)	.838 (21.3)	.940 (23.9)	.565 (14.4)
17	M25 X 1 -- 6H	1.21 (30.7)	.963 (24.5)	.940 (23.9)	.690 (17.5)
19	M28 X 1 -- 6H	1.36 (34.5)	1.042 (26.5)	.940 (23.9)	.769 (19.5)

Recommended Shrink Boot*		
Shell Size	Shrink Boot with Low Temp Adhesive	Shrink Boot without Low Temp Adhesive
15	770-028S904 Lipless boot	770-028S904U Lipless boot
17	770-028S906	770-028S906U
19	770-028S906	770-028S906U

* Shrink Boot **MUST** be ordered seperately.

Shrink boot material: compound 2013 low temperature polyolefin.



RJ45 AND USB 2.0

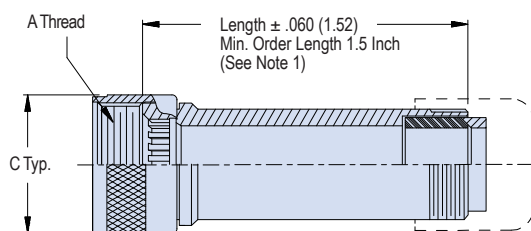
Contacts, Tools, and Accessories



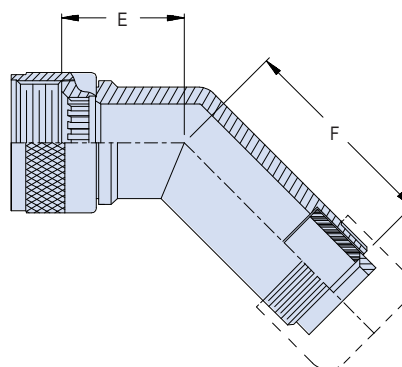
370-007 Cable Sealing Backshell with Rotatable Coupling for 28840 Type Connectors

How To Order									
Sample Part Number	370	G	S	007	M	17	03	D	1.5
Series/Basic Part No.	370 - low Profile								
Connector Designator	G = 28840								
Angular Function	J = 90° H = 45° S = Straight								
Basic Part No.	007								
Finish	See Material and Finish Table								
Shell Size	15, 17, 19								
Dash No.	See Dash Number Table								
Strain Relief Style	D = Nut								
Length	1/2 inch increments (e.g. 6 = 3 inches); Straight only								

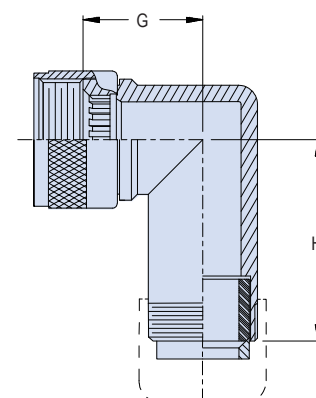
Straight (S)



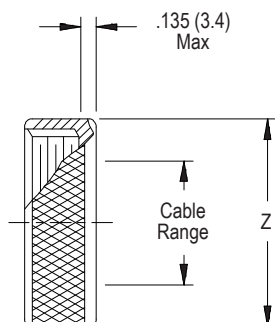
45° (H)



90° (J)



STRAIN RELIEF STYLE D



Dimensions						
Shell Size	A Thread	C Typ.	E Max	F Max	G Max	H Max
15	M22 X 1 -- 6H	1.07 (27.2)	.645 (16.4)	2.359 (59.9)	.700 (17.8)	2.369 (60.2)
17	M25 X 1 -- 6H	1.21 (30.7)	.738 (18.7)	2.469 (62.7)	.885 (22.5)	2.459 (62.5)
19	M28 X 1 -- 6H	1.36 (34.5)	.926 (23.5)	2.659 (67.5)	.975 (24.8)	2.629 (66.8)

Materials and Finishes	
NF	Aluminum/ Cadmium, olive drab
M	Aluminum/ Electroless nickel
MT	Aluminum/ Nickel PTFE
ZR	Aluminum/ Zinc-nickel black
ZI	Stainless Steel/ Passivate

Dash Number			
Dash No.	Z Max	Cable Range	
		Min.	Max.
03	.630 (16.0)	.250 (6.4)	.250 (6.4)
04	.755 (19.2)	.312 (7.9)	.312 (7.9)
06	.942 (23.9)	.438 (11.1)	.438 (11.1)

MIL-DTL-28840 Type

M



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Contacts, Tools, and Accessories



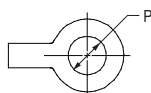
660-011 Series 66 Protective Covers for 28840 Type Receptacle Connectors

MIL-DTL-28840 Type

How To Order							
Sample Part Number	660	-011	M	D	H	5	-01
Series	660 = Series 66						
Cover Type	-011 = Metal Receptacle Cover (See Note 2)						
Material and Finish	See Material and Finish Table						
Shell Size Designator	C, D, E						
Lanyard Type	D, S, F, G, H, R, T, U (See Lanyard Type Table)						
Lanyard Length	Length in inches; i.e. 3 = 3 inches						
Ring Style Dash No.	See Tables I, II or III for Ring Selection and Dash Number. Omit for "SK" slip knot attachment						

Table I: Dash No. for Small Ring

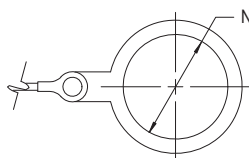
Dash No.	P Dia ± .010 (0.3)	Dash No.	P Dia ± .010 (0.3)
01	.140 (3.6)	06	.125 (3.2)
02	.182 (4.6)	07	.218 (5.5)
03	.191 (4.9)	09	.156 (4.0)
04	.197 (5.0)	00	no eyelet
05	.167 (4.2)		



For attachment to panel

Table II: Dash No. for Solid Ring (Type A)

Dash No.	Shell Size	N
208	15 (C)	1.203 (30.6)
109	17 (D)	1.266 (32.2)
111	19 (E)	1.521 (38.6)



For attachment behind jam nut

Dimensions

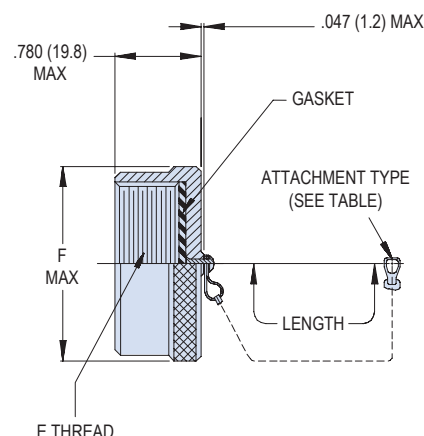
Shell Size Designator	Shell Size (Ref.)	F Thread	F Max
C	15	1.062 - 0.1P-0.2L-DS	1.260 (32.0)
D	17	1.125 - 0.1P-0.2L-DS	1.457 (37.0)
E	19	1.312 - 0.1P-0.2L-DS	1.535 (39.0)

Lanyard Type

Sym	Attachment
D	Bead chain, cres passivated, w/ terminal
F	Wire rope, nylon jacket w/ terminal
G	Nylon rope
H	Wire rope, fluoropolymer jacket w/ terminal
N	Attachment omitted
R	Wire rope, PVC jacket w/terminal
T	Wire rope, no jacket, w/terminal
S	#8 Sash chain, cres, passivate
U	Wire rope, polyurethane jacket with terminal

Materials and Finishes²

NF	Aluminum/Cadmium, Olive Drab
M	Aluminum/Electroless Nickel
MT	Aluminum/Nickel PTFE
ZR	Aluminum/Zinc-Nickel Black
Z1	Stainless Steel/Passivate



NOTES

1. Length tolerance for Sash Chain (S) is ± 1 link, for all other attachments ± .25.
2. For plug covers contact factory
3. Material and Finish
 - Gasket: Silicone
 - Components, rivet: Stainless Steel/Passivate

Lanyard Types

Bead Chain (Type D)	Sash Chain (Type S)	Rope (Types F, G, H, R, T, U)



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Contacts, Tools, and Accessories



440MS134 straight environmental, direct coupling adapter for Series 801, 804 and 805 Mighty Mouse

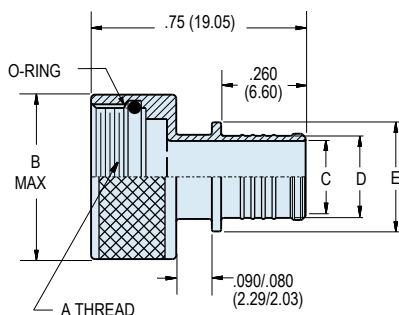


Band-Master ATS® Band
Microband 601-061
See Page M-7



Add a boot or overmold
for environmental protection
(Shown without boot)

These adapters are used with Band-Master ATS® micro band shield termination straps. Choose the smallest cable entry for your wire bundle.



STRAIGHT ENTRY
DIRECT COUPLING
440MS134

NOTES

1. For use with Micro USB Mighty Mouse Series 801 and 805
2. Material and Finish
 - Band: 300 Series SST
 - O-Ring: Silicone Elastomer

How To Order

Sample Part Number	440MS134	NF	08	04	B
Series (See Table I)	440MS134 = Straight Entry				
Shell Material and Finish	M = Aluminum/Electroless Nickel NF = Aluminum/Cadmium with Olive Drab ZN = Aluminum/Zinc-Nickel with Olive Drab Chromate ZNU = Aluminum/Zinc-Nickel with Black Chromate MT = Aluminum/Nickel-PTFE Z1 = Stainless Steel/Passivated				
Adapter Size Code	08, 10, 14, 16 See Adapter Size Code and Dimensions Table				
Cable Entry Size (See Table i)	04, 05, 06, 07, 08 See Table 1 for Dimensions				
Band Option	B = 601-060 flat band supplied K = 601-061 pre-coiled band supplied Omit = no band supplied				

Adapter Size Code and Dimensions

Adapter Size Code	Shell Size Reference		A Thread Class -2B	B Max.		Dash No.
	801/804	805		In.	mm.	
08 ¹	8	10	1/2-28 UNEF	.595	15.11	04 thru 08 See Table 1 for Dimensions
10	10	n/a	5/8-24 UNEF	.715	18.16	
14	14/15/16/17	18	15/16-20 UNEF	1.020	25.91	
16	19	21	1 1/16-18 UNEF	1.155	29.34	

Table I: Cable Entry, Band Platform Dimensions and Recommended Shrink Boot

Dash No.	Ø C		Ø D		Ø E		Straight Shrink Boot*
	In.	mm.	In.	mm.	In.	mm.	
	± .015	± 0.38	± .015	± 0.38	± .015	± 0.38	
04	.234	5.94	.273	6.93	.375	9.53	770-003S901W2
05	.272	6.91	.311	7.90	.413	10.49	770-003S902W2
06	.312	7.92	.351	8.92	.453	11.51	770-003S902W2
07	.375	9.53	.414	10.52	.516	13.11	770-003S903W2
08	.438	11.13	.477	12.12	.579	14.17	770-003S903W2

* Shrink Boot **MUST** be ordered separately.

Shrink boot material: compound 2013 low temperature polyolefin with W2 hot melt adhesive.

Series 80 Mighty Mouse

M



RJ45 AND USB 2.0 Contacts, Tools, and Accessories



440-135 EMI/RFI, Rotatable Coupling, Shrink Boot Band Adapter for Series 801, 804 and 805 Mighty Mouse



**Band-Master ATS® Band
Microband 601-061**
See Page M-7



**Add a boot or overmold
for environmental protection**
(Shown without boot)

These thread-on adapters are used with **Band-Master ATS® Micro Band** shield termination straps. Choose the smallest cable entry for your wire bundle. **Straight Entry** adapters are available in various lengths. **Straight, 45°** and **90°** adapters feature rotatable coupling nuts.



**Band-Master ATS®
Micro Band Tool**
601-101
See Page M-7

How To Order

Sample Part Number		440MS135	M	08	07	-7	K
Series (See Table I)	440MS135 = Straight Entry 440MK135 = 45° Entry 440ML135 = 90° Entry						
Shell Material and Finish	UCR = Aluminum/Zinc Cobalt Black M = Aluminum/Electroless Nickel NF = Aluminum/Cadmium with Olive Drab ZNU = Aluminum/Zinc-Nickel with Black Chromate MT = Aluminum/Nickel-PTFE Z1 = Stainless Steel/Passivated						
Shell Size Code	08, 14, 16 (See Dimensions Table)						
Dash No.	04, 05, 06, 07 (See Dash No. Table)						
Length	Applies to symbol "S", straight only Length in .125 (3.18mm) inch increments (i.e. 7 = .875 inches)						
Band Option	K = Pre-coiled Band Supplied (601-061) B= Band Supplied (601-060) Omit for no band supplied						

Table I: Cover Style

440MS135 Straight Entry	440MK135 45° Entry	440ML135 90° Entry

NOTES

- Standard Minimum Length is .75.
applies to symbol "S" straight only.
- Material and Finish
 - Band: 300 series SST
 - O-ring: silicone elastomer



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Contacts, Tools, and Accessories



440-135 EMI/RFI, Rotatable Coupling, Shrink Boot Band Adapter for Series 801, 804 and 805 Mighty Mouse

Series 80 Mighty Mouse

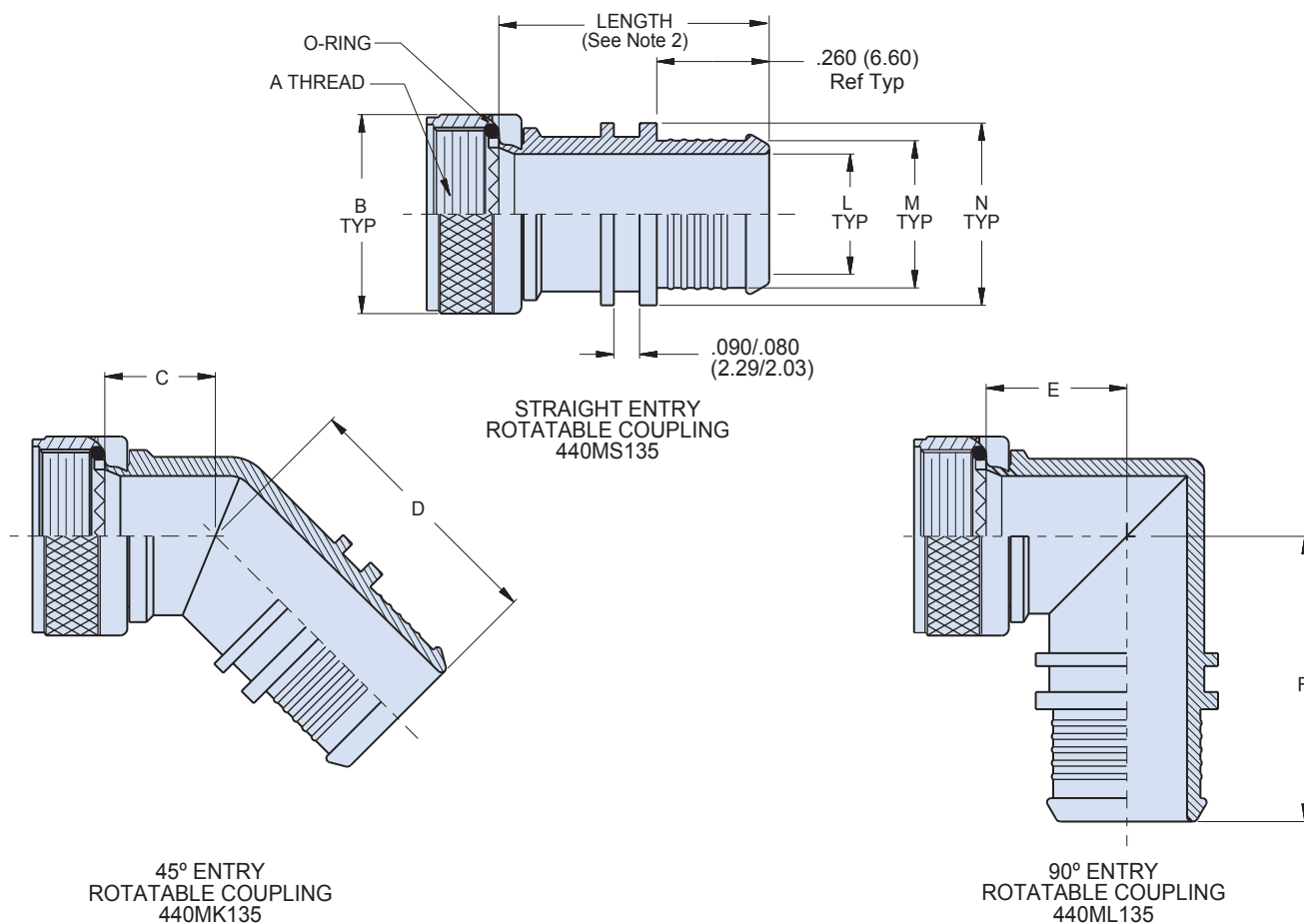
Dimensions														
Shell Size Code	Shell Size Reference		A Thread Class -2B	B Max		C Max.		D Max.		E Max.		F Max.		Max Dash No.
	801 & 804	805		In	mm	In	mm	In	mm	In	mm	In	mm	
08	8	10	1/2-28 UNEF	.70	17.78	.58	14.73	.70	17.78	.74	18.80	.86	21.84	07 See Table I
14	14,15,16,17	18,19	15/16-20 UNEF	1.137	28.88	.69	17.53	.80	20.32	.95	24.13	1.09	27.69	
16	19	21	1 1/16-18 UNEF	1.230	31.24	.71	18.03	.82	20.83	.98	24.89	1.13	28.70	

Table I: Cable Entry and Band Platform Dimensions							
Dash No.	L Dia		M Dia		N Dia		Straight Shrink Boot*
	in	mm	in	mm	in	mm	
04	.250	6.35	.289	7.34	.391	9.93	809S060-1L
05	.312	7.92	.351	8.92	.453	11.51	809S060-2L
06	.375	9.53	.414	10.52	.516	13.11	809S060-3L
07	.438	11.13	.477	12.12	.579	14.71	809S060-3L

* Shrink Boot **MUST** be ordered separately.

Shrink boot material:

compound 2013 low temperature polyolefin with W2 hot melt adhesive.



M



RJ45 AND USB 2.0

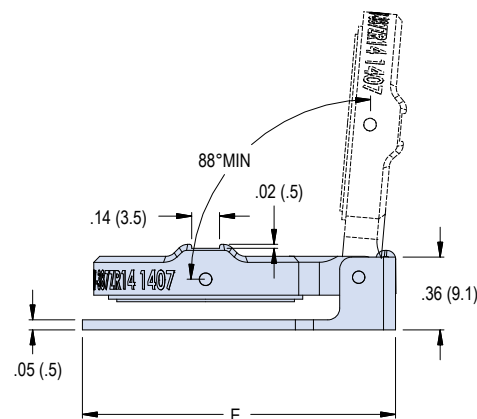
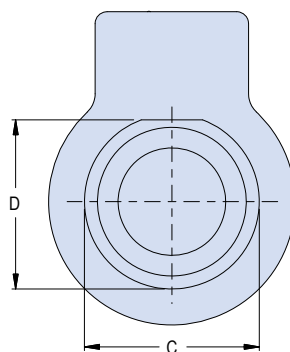
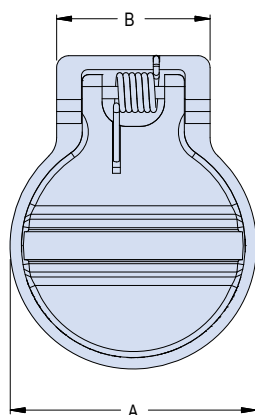
Contacts, Tools, and Accessories



667-387 Spring Loaded Flop-Lid Cover for Series 804 Rear Panel Mount Jam Nut Connector

How To Order				
Sample Part Number	667-387	NF	15	F0
Product Series-Basic No.	667-387 = Mighty Mouse Series 804 Flop-Lid Cover			
Material and Finish	See Material and Finish Table			
Connector Shell Size	See Dimensions Table			
Panel Thickness	1 = .063 ±.03 (1.60 ±.8)		2 = .125 ±.03 (3.18 ±.8)	

Dimensions										
Shell Size	A Dim)		B Dim		C Dia		D Flat		E Dim	
	In	mm	In	mm	In	mm	In	mm	In	mm
15	1.42	36.1	.89	22.6	1.070	27.18	1.041/1.037	26.44/26.34	1.74	44.20



Material and Finish		
Sym	Material	Finish Description
M	Aluminum	electroless nickel
NF		Cadmium with Olive Drab
ZN		Zinc-Nickel with Olive Drab Chromate
ZNU		Zinc-Nickel with Black Chromate
MT		Aluminum / Nickel-PTFE
Z1	SST	passivated

NOTES

- Mates to Glenair 804 series rear mousing jam nut connectors
- Hardware Material and finish
 - Housing, cover: see Material and Finish Table
 - Shaft, spring: cress/passivate
 - Sleeve: delrin
 - Gasket: silicone/NA



RJ45 AND USB 2.0

Contacts, Tools, and Accessories



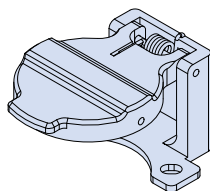
667-424 Spring Loaded Flop-Lid Cover for Series 805 Wall Mount and Jam Nut Connectors

Series 80 Mighty Mouse

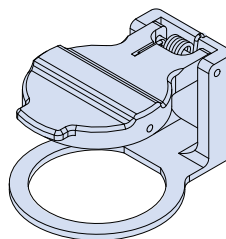
How To Order						
Sample Part Number	667-424	NF	18	T0	J	59
Product Series-Basic No.	667-424 = Mighty Mouse Series 805 Flop-Lid Cover					
Material and Finish	See Material and Finish Table					
Connector Shell Size	See Dimensions Table					
Panel Thickness	See Panel Thickness Table for Dash No.					
Type of Mounting	J = Jam Nut W = Wall Mount					
Conductive Silicone	Omit for Non-conductive 59 = Conductive Silicone					

Panel Thickness				
Dash No	Panel Thickness	Shell Size	H Max	
			Jam Nut Mount	Wall Mount
T0	.000	8-18	N/A	.914
		19-23	N/A	.952
T1	.062 (See Note 1)	8-18	.993	.852
		19-23	1.031	.890

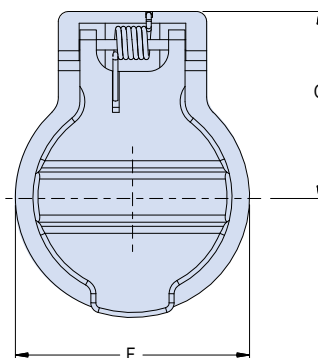
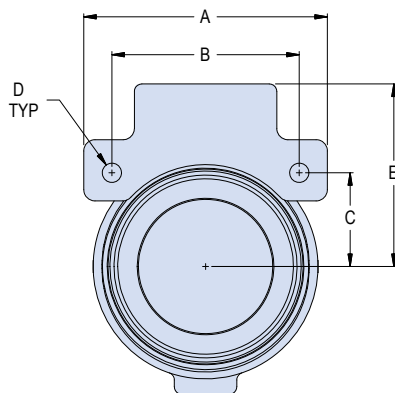
Dimensions														
Shell Size	A Dim		B Dim		C Dim		D ±.002 (.05)		E ±.031 (.79)		F Dim ±.031 (.78)		G Dim ±.031 (.78)	
	In	mm	In	mm	In	mm	In	mm	In	mm	In	mm	In	mm
10	0.975	20.03	0.785	16.12	0.393	8.07	0.094	1.93	0.825	16.95	0.906	18.61	0.79	16.23
18	1.475	30.30	1.255	25.78	0.628	12.90	0.128	2.63	1.106	22.72	1.465	30.09	1.1	22.59
19	1.537	31.57	1.327	27.26	0.664	13.64	0.128	2.63	1.34	27.52	1.535	31.53	1.338	27.48
21	1.663	34.16	1.452	29.82	0.726	14.91	0.128	2.63	1.465	30.09	1.814	37.26	1.478	30.36



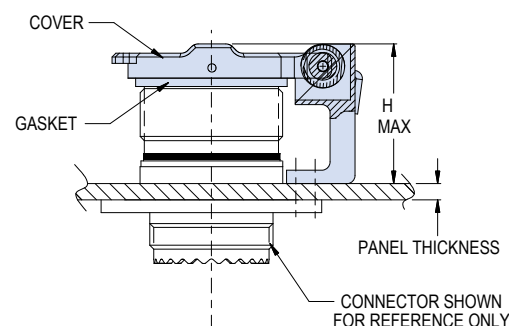
FOR WALL MOUNT RECEPTACLE



FOR JAM NUT MOUNT RECEPTACLE



Material and Finish		
Symbol	Material	Finish Description
M	Aluminum	Electroless nickel
NF		Cadmium with Olive Drab
ZN		Zinc-Nickel with Olive Drab Chromate
ZNU		Zinc-Nickel with Black Chromate
MT		Aluminum / Nickel-PTFE
Z1	SST	passivated



NOTES

- Cover Fits nominally onto panel with .062 thickness, but will also work for panels as thin as .031
- Hardware Material and finish
 - Cover: see Material and Finish Table
 - Spring: stainless steel/passivate
- Sleeve: delrin
- Gasket: silicone/NA

M



RJ45 AND USB 2.0

Contacts, Tools, and Accessories



667-218 Receptacle Metal Protective Covers for Mighty Mouse Series 801 Connectors

Protect Connectors From Damage Machined aluminum covers have rubber gaskets for a watertight fit.

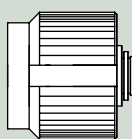
Stainless Steel Fittings and Rings Choose small diameter eye fittings for panel attachment. Larger rings fit under the jam nut or over cable jackets.

Polyurethane-Coated SST Wire Rope offers high strength, excellent abrasion resistance and good flexibility. Or, select a fluoropolymer jacket for high temperature exposure.

Braided Nylon Rope provides excellent flexibility and good abrasion resistance, and can be ordered with slip knot fittings for easy installation on any size cable.

How To Order						
Sample Part Number	667-218	-M	-G	9	04	-6
Series (See Table I)	667-218 = Receptacle Cover (see note 1)					
Material and Finish	M = Aluminum/Electroless Nickel RoHS Compliant MT = Aluminum/Nickel-PTFE RoHS Compliant NF = Aluminum/Cadmium with Olive Drab Chromate ZNU = Aluminum/Zinc-Nickel with Black Chromate Z1 = Stainless Steel/Passivated RoHS Compliant					
Attachment Type	D = Bead Chain, CRES, Passivate G = Nylon Rope N = No Attachment S = SST Sash Chain T = SST Wire Rope, No Jacket "SST" = Stainless Steel F = Wire Rope, Nylon Jacket H = SST Wire Rope, Fluoropolymer Jacket R = Wire Rope, PVC Jacket SK = Nylon Rope With Slip Knot U = SST Wire Rope, Polyurethane Jacket					
Shell Size	8, 16, 17, 19					
Attachment Code (See Table II)	Small Ring (Attached to Panel)= 01 thru 06 Solid Ring (Rear Panel Mount Jam Nut Application) = 14 thru 33					
Attachment Length (inches)	Omit for attachment Type N (No Attachment) Example "-6" equals six inch length					

Table I: Cover Style



667-218

Receptacle Cover

NOTES

- For plug covers contact factory
- Material and Finish
 - Cover: Aluminum alloy or stainless steel
 - Gasket: Fluorosilicone rubber
 - Wire, Hardware: Stainless steel, passivated



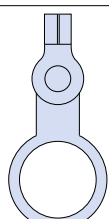
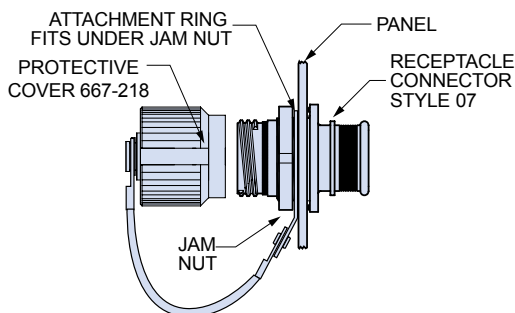
RJ45 AND USB 2.0

Contacts, Tools, and Accessories



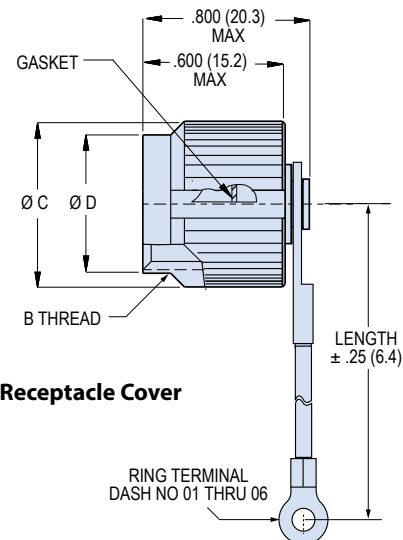
667-218 Receptacle Metal Protective Covers for Mighty Mouse Series 801 Connectors

667-218 Cover Attachment for RPM Jam Nut Receptacle



Solid Ring

Atthmt Code	Shell Size	Ring I.D.		Ring O.D.	
		In. ± .010	mm. ± 0.25	In. ± .015	mm. ± 0.38
16	8	.570	14.48	.69	17.40
20	16	1.070	27.17	1.20	30.35

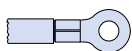
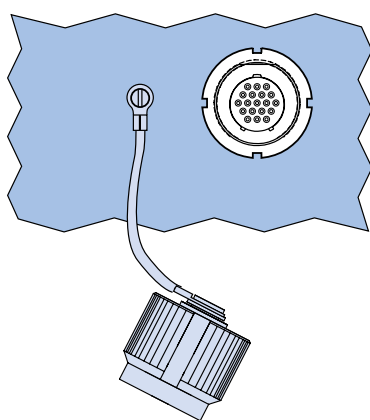


667-218 Receptacle Cover

Dimensions

Shell Size	Ø A Max.		Ø B Max.		Ø D Max.		C Thread
	In.	mm.	In.	mm.	In.	mm.	
8	.653	16.6	.675	17.15	.587	14.9	.5000-.05-1L
16	1.150	29.2	1.261	32.03	1.092	27.7	1.000-.1P-.2L

667-218 Cover Attachment to a Panel with a Screw



Small Ring for Attaching Receptacle Covers to a Panel with a Screw

Atthmt Code	Screw Size	Ring I.D.		Ring O.D.	
		In. ± .005	mm. ± 0.13	In. Max.	mm. Max.
01	#4, M3	.126	3.20	.31	7.9
02	#6	.145	3.68	.31	7.9
04	#8, M4	.188	4.78	.31	7.9
06	#10	.197	5.00	.31	7.9

Lanyard Options

	-65° to +100°C., black, very flexible, very good abrasion resistance, good resistance to fuels, .120" (3mm) diameter
	Black polyurethane over stainless steel rope, -65° to +125°C., very flexible, excellent abrasion resistance, excellent resistance to fuels, .080" (2mm) diameter
	Translucent FEP jacket over stainless steel, -65° to +200°C., fair flexibility, good abrasion resistance, .100" diameter
	Stainless steel, #8 chain, .240" (6mm)
	65° to +100°C., black, very flexible, very good abrasion resistance, good resistance to fuels, .120" (3mm) diameter. Length includes .5" (13mm) diameter loop.

Series 80 Mighty Mouse

M



RJ45 AND USB 2.0

Contacts, Tools, and Accessories



667-202 Receptacle Metal Protective Cover for Mighty Mouse Series 804 connectors

Protect Connectors From Damage

Machined aluminum covers prevent ingress of contamination and water.

Stainless Steel Fittings and Rings

Choose small diameter eye fittings for panel attachment. Larger rings fit under the jam nut or over cable jackets. Split rings can be installed on fully assembled cables.

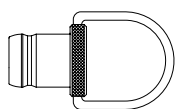
Polyurethane-Coated SST Wire Rope offers high strength, excellent abrasion resistance and good flexibility. Or, choose Fluoropolymer[®] jacket for high temperature exposure.

Braided Nylon Rope provides excellent flexibility and good abrasion resistance, and can be ordered with slip knot fittings for easy installation on any size cable.

How To Order

Sample Part Number		667-202	M	8	H	6	-14	R
Series (See Table I)	667-202 = Receptacle Cover (see note 1)							
Shell Material / Finish	M = Aluminum/Electroless Nickel RoHS Compliant NF = Aluminum/Cadmium with Olive Drab Chromate ZNU = Aluminum/Zinc-Nickel with Black Chromate MT = Aluminum/Nickel-PTFE RoHS Compliant Z1 = Stainless Steel/Passivated RoHS Compliant							
Shell Size	8, 10, 14, 15, 16							
Attachment Type	D = Bead Chain, CRES, Passivate G = Nylon Rope N = No Attachment S = SST Sash Chain T = SST Wire Rope, No Jacket "SST" = Stainless Steel	F = Wire Rope, Nylon Jacket H = SST Wire Rope, Fluoropolymer Jacket R = Wire Rope, PVC Jacket SK = Nylon Rope With Slip Knot U = SST Wire Rope, Polyurethane Jacket						
Attachment Length (inches)	Omit for attachment Type N (No Attachment) Example: "-6" equals six inch length							
Attachment Code (See Table II)	Small Ring = 01 thru 06 Large Ring = 28 thru 30							
Pull Ring Option	R = Supplied with Pull Ring (Omit for none)							

Table I: Cover Style



667-202

Push Pull Receptacle Cover with Pull Ring

NOTES

- For plug covers contact factory
- Material and Finish
 - Cover: Aluminum alloy or stainless steel
 - Hardware: Stainless steel, passivate

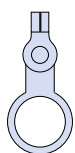
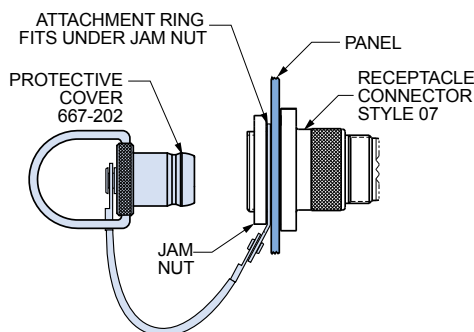


RJ45 AND USB 2.0 Contacts, Tools, and Accessories



667-202 Receptacle Metal Protective Cover for Mighty Mouse Series 804 Connectors

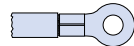
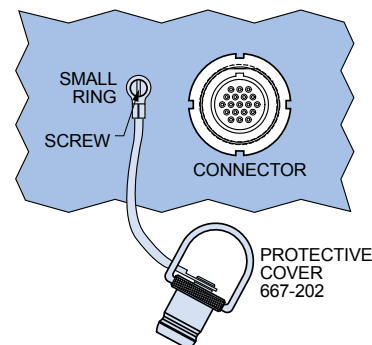
667-202 Cover Attachment to RPM Jam Nut Receptacle



Large Ring

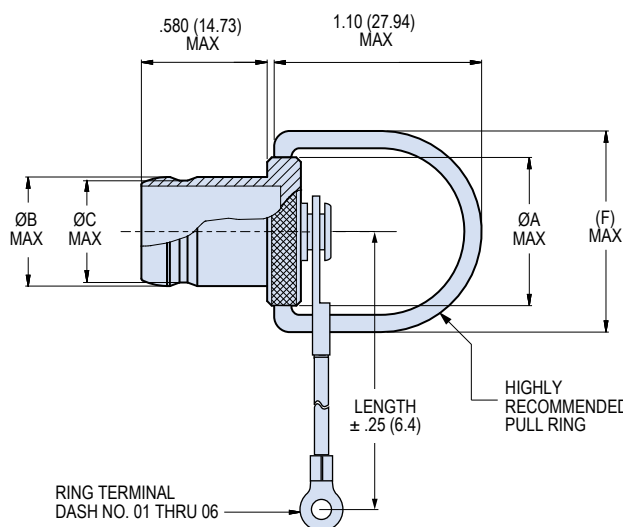
Dia. Code	Shell Size	Ring I.D.		Ring O.D.	
		In.	mm.	In.	mm.
28	14, 15	±.010	±0.25	±.015	±0.38
21	14, 15	1.015	25.78	1.20	30.48
20	14, 15	1.135	28.8	1.25	31.8
30	16	1.380	35.1	1.48	37.6

667-202 Cover Attachment to Panel



Small Ring for
Attaching Receptacle
Covers to a Panel with
a Screw

Dia. Code	Screw Size	Ring I.D.		Ring O.D.	
		In.	mm.	In.	mm.
01	#4, M3	±.005	±0.13	Max.	Max.
02	#6	.126	3.20	.31	7.9
04	#8, M4	.145	3.68	.31	7.9
06	#10	.188	4.78	.31	7.9



Dimensions

Shell Size	Ø A Max.		Ø B		Ø C		(F) Max	
	In	mm	In	mm	In	mm	In	mm
8	.614	15.60	.414	10.52	.383	9.73	.87	22.10
10	.773	19.63	.548	13.92	.513	13.03	1.03	26.16
14	.980	24.89	.781	19.84	.749	19.02	1.23	31.24
15	1.045	26.54	.843	21.41	.811	20.60	1.30	33.02
16	Contact Factory							

Lanyard Options



Nylon Rope

-65° to +100°C., black, very flexible, very good abrasion resistance, good resistance to fuels, .120" (3mm) diameter



Polyurethane Coated Wire Rope

Black polyurethane over stainless steel rope, -65° to +125°C., very flexible, excellent abrasion resistance, excellent resistance to fuels, .080" (2mm) diameter



Fluoropolymer Jacketed Wire Rope

Translucent FEP jacket over stainless steel, -65° to +200°C., fair flexibility, good abrasion resistance, .100" diameter



Sash Chain

Stainless steel, #8 chain, .240" (6mm)



Slip Knot (SK)
for Attaching Covers to Cable

65° to +100°C., black, very flexible, very good abrasion resistance, good resistance to fuels, .120" (3mm) diameter. Length includes .5" (13mm) diameter loop.



RJ45 AND USB 2.0 Contacts, Tools, and Accessories



667-262 Receptacle Metal Protective Covers for Mighty Mouse Series 805

Series 80 Mighty Mouse



Receptacle
Cover

Protect Connectors From Damage

Machined aluminum or stainless steel protective covers have fluorosilicone gasket for a watertight fit.

Stainless Steel Fittings and Rings

Choose small diameter eye fittings for panel attachment. Larger rings fit under the jam nut or over cable jackets. Split rings can be installed on fully assembled cables.

Polyurethane-Coated SST Wire Rope

provide resistance and good flexibility. Or, choose a Fluoropolymer jacket for high temperature exposure.

Braided Nylon Rope

provides excellent flexibility and good abrasion resistance, and can be ordered with slip knot fittings for easy installation on any size cable.

How To Order						
Sample Part Number	667-262	-M	-G	19	04	-6
Series (See Table I)	667-262 = Receptacle Cover (see note 1)					
Shell Material / Finish	M = Aluminum/Electroless Nickel RoHS Compliant NF = Aluminum/Cadmium with Olive Drab Chromate ZNU = Aluminum/Zinc-Nickel with Black Chromate MT = Aluminum/Nickel-PTFE RoHS Compliant Z1 = Stainless Steel/Passivated RoHS Compliant					
Attachment Type	D = Bead Chain, CRES, Passivate F = Wire Rope, Nylon Jacket G = Nylon Rope H = SST Wire Rope, Fluoropolymer Jacket N = No Attachment R = Wire Rope, PVC Jacket S = SST Sash Chain SK = Nylon Rope With Slip Knot T = SST Wire Rope, No Jacket U = SST Wire Rope, Polyurethane Jacket "SST" = Stainless Steel					
Shell Size	19, 21					
Attachment Code (See Table II)	Small Ring = 01 thru 06 Large Ring = 18 thru 30					
Attachment Length (inches)	Omit for attachment Type N (No Attachment) Example "-6" equals six inch length					

Table I: Cover Style

667-262	Receptacle Cover

NOTES

1. For plug covers contact factory
2. Material and Finish
 - Gasket: Fluorosilicone rubber
 - Wire, Hardware: Stainless steel, passivated

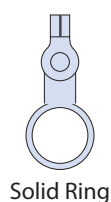
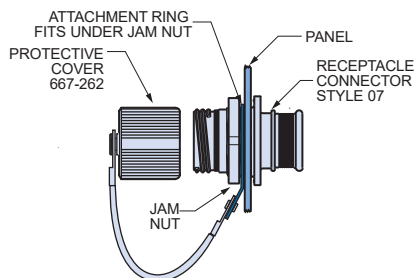


RJ45 AND USB 2.0 Contacts, Tools, and Accessories



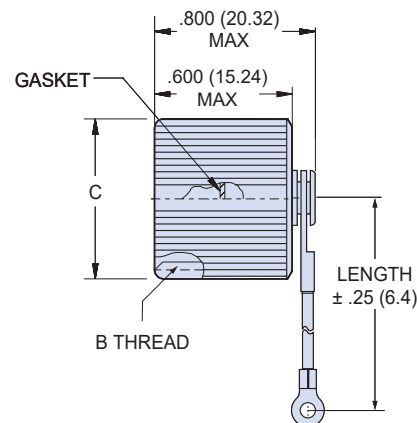
667-262 Receptacle Metal Protective Covers for Mighty Mouse Series 805

667-262 Cover Attachment to RPM Jam Nut Receptacle



Solid Ring

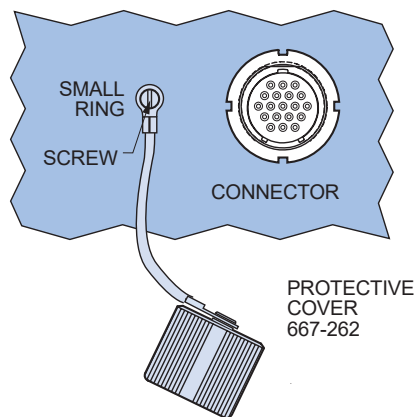
Atchmt Code	Shell Size	Ring I.D.		Ring O.D.	
		In.	mm.	In.	mm.
		± .010	±0.25	± .015	± 0.38
18	10	.695	17.65	.82	20.83
22	18	1.210	30.73	1.31	33.27
23	19	1.275	32.39	1.37	34.80
30	21	1.380	35.05	1.48	37.59



Dimensions

Shell Size	C		B Thread
	In.	mm.	
19	1.340	34.0	1.1875-.1P-.3L-TS-2B
21	1.490	37.8	1.3125-.1P-.3L-TS-2B

667-262 Cover Attachment to Panel



Small Ring for Attaching Receptacle Covers to a Panel with a Screw

Atchmt Code	Screw Size	Ring I.D.		Ring O.D.	
		In.	mm.	In.	mm.
		±.005	±0.13	Max.	Max.
01	#4, M3	.126	3.20	.31	7.9
02	#6	.145	3.68	.31	7.9
04	#8, M4	.188	4.78	.31	7.9
06	#10	.197	5.00	.31	7.9

Lanyard Options

	-65° to +100°C., black, very flexible, very good abrasion resistance, good resistance to fuels, .120" (3mm) diameter
	Black polyurethane over stainless steel rope, -65° to +125°C., very flexible, excellent abrasion resistance, excellent resistance to fuels, .080" (2mm) diameter
	Translucent FEP jacket over stainless steel, -65° to +200°C., fair flexibility, good abrasion resistance, .100" diameter
	Stainless steel, #8 chain, .240" (6mm)
	65° to +100°C., black, very flexible, very good abrasion resistance, good resistance to fuels, .120" (3mm) diameter. Length includes .5" (13mm) diameter loop.



Coming Soon SuperSeal™ RJ45 CAT 6A ETHERNET CONNECTORS

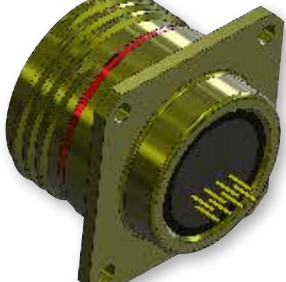


RJ45 Cat 6a MIL-
DTL-38999 Series III
Type Wall-Mount
Receptacle and Plug

High performance, proven reliability environmental connectors housing RJ45 interfaces for mission-critical data transfer applications

- Superior sealing—IP67 minimum in unmated condition—for complete system protection against harsh elements
- Advanced thru-coupler grounding for superior electrostatic discharge and EMC
- Crimp, solder-cup, PC tail, quadrax, and compliant pin contact variations
- Scoop proof, self-locking, triple-start threaded coupling design of MIL-DTL-38999 Series III type connectors
- RJ45 cordsets with multiple length options available
- Integrated banding platform options for easy cable termination and EMI/RFI shielding
- Optional spring loaded protective covers for sand, dust, and mechanical protection of junction boxes and switches
- RJ45 plug and/or jack interfaces
- High Data Transfer Rates: 10GBase

SuperSeal™ MIL-DTL-38999 Type RJ45 Connector Selection Guide

			
MIL-DTL-38999 Series III Type Plug Connectors with sealed RJ45 Plug (mated condition) Ethernet interfaces in a two piece coupler design. Easy field termination with Metal Gland backshell or shrink boot sealing options.	MIL-DTL-38999 Series III Type Receptacle Connectors with sealed RJ45 Jack-to-Jack Ethernet interfaces in a one piece coupler design. Metal Gland backshell and spring loaded protective covers available.	MIL-DTL-38999 Series III Type Receptacle Connectors with AS39029 crimp rear-release size #22D contacts	MIL-DTL-38999 Series III Type Receptacle Connectors with sealed RJ45 Jack interface and AS39029 rear-release crimp or solder cup #22D contacts. Size 22 Compliant Pin contacts, Quadrax Contacts or #22 PC Tail contacts also available.

Test Description	SuperSeal MIL-DTL-38999 Series III RJ45 Performance Requirements/Specifications	Procedure Per MIL-DTL-38999 and TIA/EIS-568-B.2
Contact Resistance	Connecting hardware shall conform to A.2; a thru c of TIA/EIA-568-B.2 per IEC 60512-2, Test Method 2A, millivolt level method (shall not exceed 0.025 ohms and 0.050 ohms during subsequent tests)	TIA/EIA-568-B.2, Section A.2 IAW IEC 60512-2, Test method 2A
Insulation Resistance	Per IEC 60512-2, Test 3a, Method C, test voltage 500 VDC (Insulation Resistance minimum of 100 Ohm)	IAW IEC 60512-2, Test Method 2A
Mating Durability	500 to 1000 cycles (finish dependent) with no mechanical damage. Contact Resistance requirement as described above shall be met at 0.050 ohms after 100, 200 and 250 cycles (and 500 per finish). This shall be performed before Thermal Shock and Humidity/ Temperature cycling test and the additional 250 cycles shall be testing after completion in the same manner.	4.5.8 IAW TIA/EIA-568-B.2
Contact Retention	Individual contacts capable of withstanding at least 10 pounds axial load applied uniformly 1 lb/sec	IAW EIA-364-29
Vibration	Per MIL-DTL-38999 Series III Condition VI Letter J; Sine: 10 to 2,000 Hz each of three mutually perpendicular axis total of 36 hours (4 hours each ambient, -40°C and +85°C temperatures) Random: 43.9 rms g's random vibration 16 hours (8 hours longitudinal and perpendicular direction). No electrical discontinuity.	3.27 Sine 4.5.23.3 & 4.5.23.4 Random 4.5.23.1 IAW EIA-364-28
Shock	100 mA max with no discontinuities excess of 1 microsecond. Standard: Per EIA-364-27 – half sine wave @ 300 G. High Impact: Per MIL S 901, Grade A.	4.5 IAW EIA-364-27 IAW MIL S 901
Thermal Shock	Per IEC 60068-2-14 Test Number Nb. • Temperature range -40 - +85°C ± 2°C • Exposure Time: 30 min. • Number of Cycles: 100 • Test Group B contacts shall be inspected and contact resistance measured after 50 cycles and at completion of est. These specimens shall be used for humidity/thermal cycling testing.	TIA/EIA-568-B.2, A.7 IAW IEC 60068-2-14, Test Number Nb
Humidity/ Temperature Cycling	EIA-364-31 with exceptions b, d & e; EIA 364-32 Test Condition A, except steps 2 & 4 shall be 2 minutes max duration; Humidity/Temperature: TIA/EIA-568-B.2, A.8 per IEC 60068-2-38; Temperature for step 1 shall be -45 +0/-5°C. • Temperature for step 3 shall be 85 +5/-0°C Exposure Time: 30 min. • Number of Cycles: 100 No blistering, peeling or separation of the plating or other damage detrimental to operation of connector	4.5.11.1 or 4.5.11.2 4.5.13 IAW EIA-364-31, Method IV with temperature exceptions; IAW EIA-364-32, Test cond. A; IAW IEC 60068-2-14, Test Method Z/AD
Salt Spray	5% solution, 34°-36°C. 48-1000 hours, depending on finish. Unmated connectors show no lifting of plated coating or exposure of basis material under 3X magnification which adversely affects performance.	4.5.13 IAW EIA-364-26
Water Immersion	1 Meter for 1 hour, Unmated	MIL-STD-810 method 512
EMI Shielding	Per IEC 60603-7, 1 MHz to 1000 MHz with effectiveness of 22 dB.	4.5.28 EIA-364-66
Fluid Resistance	Per EIA-364-10 unmated connector shall not experience any damage detrimental to performance after immersion in fluid.	4.5.30 IAW EIA-364-10

MIL-DTL-38999 Connector and Cable Assembly Material and Finish Codes

Code	Material	Finish	Finish Specification	Hrs. Salt Spray	Electrical Conductivity	Operating Temp. Range	RoHS Compliance
ME	Aluminum	Electroless Nickel	MIL-DTL-24308 Class K	96	Yes		Yes
MT	Aluminum	Nickel PTFE	SAE AMS2454	500	Yes	-65° to +175°C	Yes
NF	Aluminum	Cadmium, Olive Drab	SAE-AMS-QQ-P-416 Type II Class 2 over electroless nickel	500	Yes	-65 to +175°C	No
ZR	Aluminum	Zinc-Nickel, Black	ASTM B841 Grade 5 over electroless nickel	500	Yes	-65 to +175°C	Yes

MIL-DTL-38999 RJ45 Cat6a Electrical Specs for Plug & Receptacle

Rating	Category 6a
Data rate	10GBase
Voltage rating	1000 Volts
Current rating	1.5 Amps (max)
Frequency	500 MHz (max)
Wiring	Straight through
Shield continuity	Continuous thru-coupler
Cable length	100 M (max)



For more information
contact Glenair at
818-247-6000 or
visit our website at
www.glenair.com
U.S. CAGE code 06324



HDMI 2.0 CONNECTORS

MIL-DTL-38999 Series III Type Connectors



Product selection guide

N



233-360

E-2

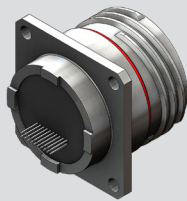
SuperSeal™ HDMI 2.0 Type A Panel Mount Couplers with Accessory Threads



233-364

E-9

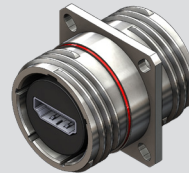
SuperSeal™ HDMI 2.0 Type A Panel Mount Couplers with Break-out Board



233-362

E-5

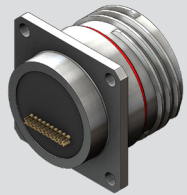
SuperSeal™ HDMI 2.0 Type A Panel Mount Couplers with PC Tails



233-365

E-12

SuperSeal™ HDMI 2.0 Type A Panel Mount Feed-thru Couplers



233-363

E-7

SuperSeal™ HDMI 2.0 Type A Panel Mount Couplers with Solder Cups



233-368

E-14

SuperSeal™ HDMI 2.0 Type A Plug Adapter



SERIES 23

SuperSeal™

HDMI 2.0 Ruggedized solutions



SuperSeal is part of the SuperNine family of 38999 Type connectors featuring improved sealing and grounding capabilities to house commercial HDMI 2.0 interfaces. All SuperSeal connectors are IP68 rated in the mated condition and IP67 rated in the unmated. HDMI 2.0 is the defacto standard for transmission of high-definition video signals from an HDMI-source to compatible monitors or video projectors. A ruggedized solution for C4ISR mobile field applications, SuperSeal HDMI 2.0 connectors provide military grade connector performance including metal-to-metal grounding, polarization keying, and non-corrosive conductive material and finish options. The HDMI 2.0 protocol supports audio/video data transmission rate of 18.0 Gbit/s and a maximum data rate of up to 14.4 Gbit/s and allows for simple plug-and-play connectivity and *hot-swappable* addition of external peripherals without restarting systems.

- **Superior sealing—IP67 unmated—for complete system protection against water, sand and dust**
- **Highly durable SuperSeal™ insert design, provides enhanced operating temperature, increased life-cycle, and rugged vibration and shock performance**
- **Crimp, solder-cup, PC tail, break-out board, feed-thru and cable assembly designs available**



HDMI 2.0 CONNECTORS

MIL-DTL-38999 Series III Type Connectors

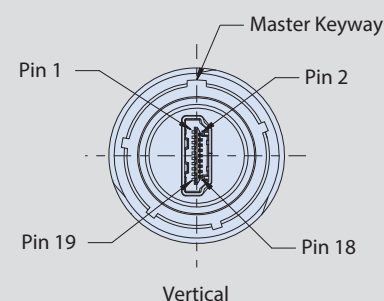
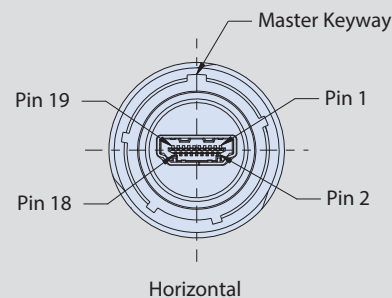


HDMI 2.0 Performance Specifications

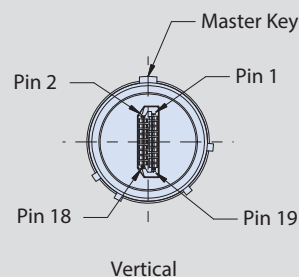
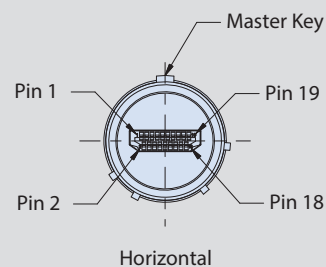
HDMI 2.0 Performance Specifications	
Property	MIL-DTL-38999 Series III Type
Material and Finish	
Shell/Coupling and Plating	Complete list of finishes is available in Section A of the SuperSeal catalog
Contacts	Copper alloy/gold plate
HDMI Insulator	LCP
Grommet, Peripheral Seal, Interfacial Seal, O-ring	Blended fluorosilicone/silicone elastomer, 30% silicone per ZZ-R-765, 70% fluorosilicone per MIL-R-25988
Shell Size	17 Consult factory for other shell size options
Electrical Specifications	
Data Rate	Up to 18 Gbps
Power Usage	+5.0 volts
Current Rating	0.3 Amps min.
D.W.V.	300 VAC
I.R.	100 Mega Ohms min
Cabling Length	10 Meters Max (recommended)
Shielding	Continuous through coupler or continuous coupler to shell
Environmental/Mechanical Performance	
Sealing	IP67 unmated IP68 mated
Outgassing	Mod Code 186S meets outgassing requirements per ASTM E 595 and meets NASA level 3 screening for standard reliability Mod Code 928 meets outgassing requirements per UL 94 V-0
Operating Temperature	-20°C to +85°C
Backshell Interface	MIL-DTL-38999 Designator H
Mating System	Triple-start stub ACME
Mating Cycles	500

HDMI 2.0 CONNECTOR ORIENTATION OPTIONS

Receptacle



Plug





HDMI 2.0 CONNECTORS

MIL-DTL-38999 Series III Type Connectors



233-360 Panel mount couplers with accessory threads

N



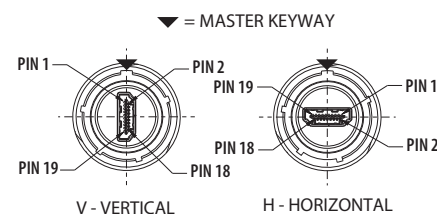
Part Number Development						
Sample Part Number	233-360	NF	00	-17	N	H
Basic Number	233-360					
Finish	See Material and Finish table					
Connector Style ¹	See Connector Style table					
Shell Size	17					
Alternate Key Position ¹	A, B, C, D, E, N = Normal per MIL-DTL-38999					
HDMI Orientation	H = Horizontal V = Vertical					
Shrink Boot	T = Part No. 770-028 (Omit for None)					

Material and Finish	
NF	Aluminum/Cadmium, Olive Drab
ME	Aluminum/Electroless Nickel
MT	Aluminum/Nickel PTFE
ZR	Aluminum/Black Zinc-Nickel
AB	Marine Bronze
XM	Composite/Electroless Nickel

Additional material / finish options available consult factory

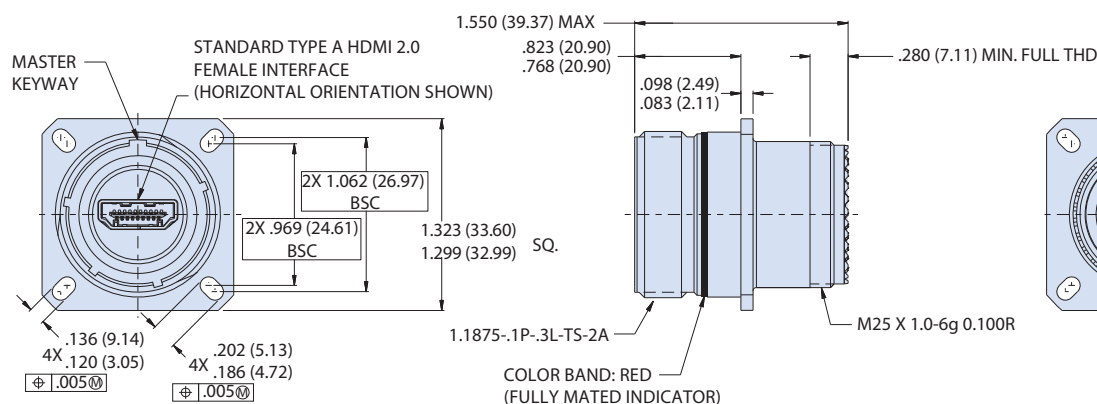
Connector Style	
00	Wall mount receptacle with slotted holes
D0	Wall mount receptacle with thru-holes
CM	Wall mount receptacle with metric clinch nuts
CS	Wall mount receptacle with standard clinch nuts
07	Rear panel mount, jam nut receptacle
05	Inline receptacle

HDMI 2 FEMALE ORIENTATION OPTIONS (PARTIAL FRONT VIEWS SHOWN)



All external dimensions, features, etc. compliant with D38999/20, /24, &/26. Consult factory for additional information.

00 - WALL MOUNT RECEPTACLE WITH SLOTTED THRU-HOLES



NOTES

- See Section A for alternate key/keyway positions and panel cutout dimensions
- Meets IP67 in unmated condition, IP68 mated
- HDMI Type A female port, front and back
- Front panel mount only
- Material and Finish
 - Shell, jam nut: see material finish table
 - Seals: silicone based elastomer
 - Hardware: stainless steel/passivated
- HDMI:
 - Housing: thermoplastic/NA
- Shell: copper alloy nickel plated
- Terminal: copper alloy/gold plated
- HDMI performance: design meets HDMI 2.0 protocol requirement including 18Gbps of bandwidth and supports 4K resolution and 60Hz



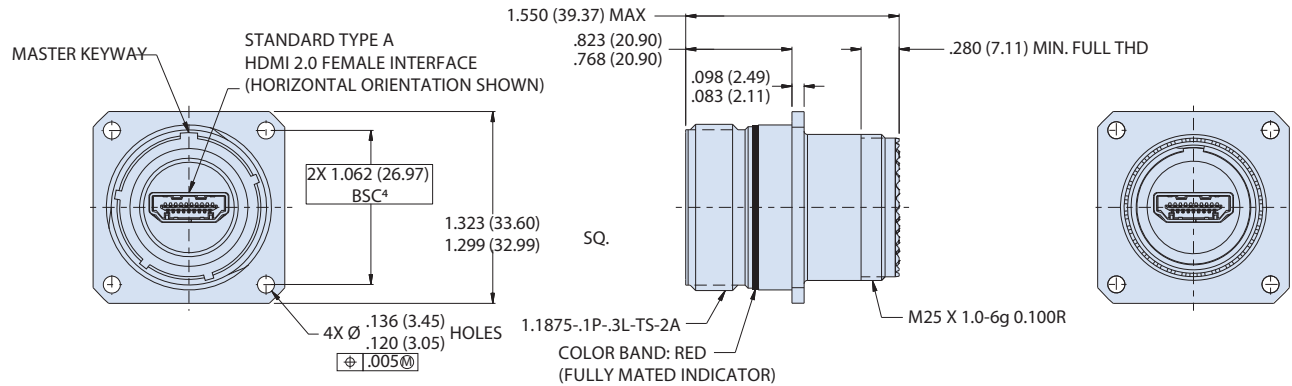
HDMI 2.0 CONNECTORS

MIL-DTL-38999 Series III Type Connectors

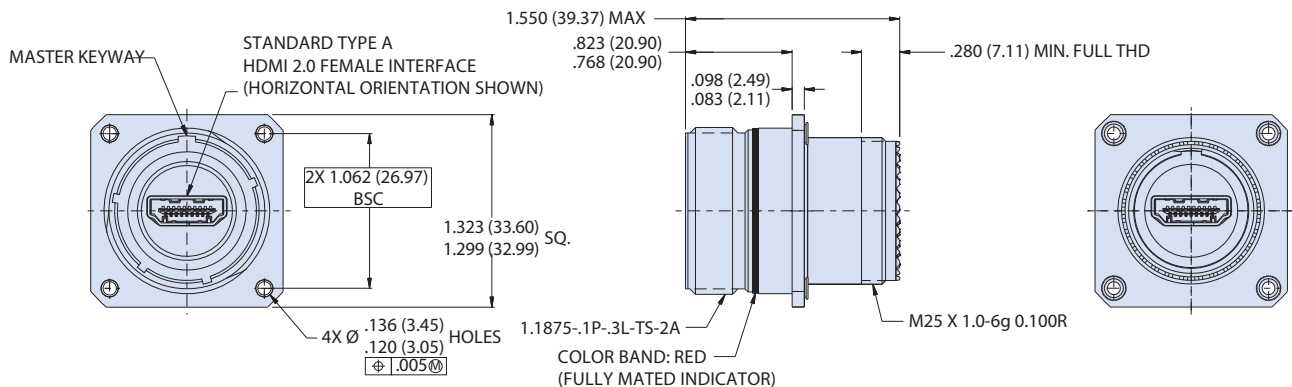


233-360 Panel mount couplers with accessory threads

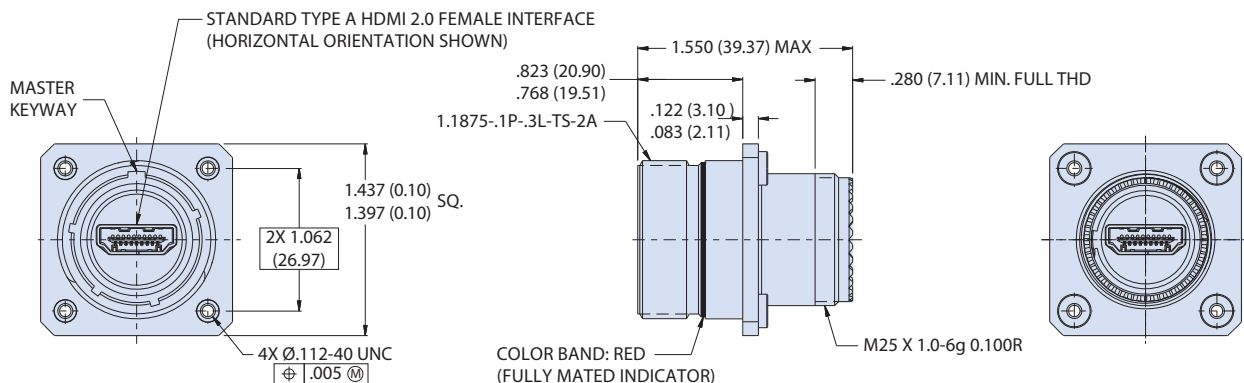
DO - WALL MOUNT RECEPTACLE WITH ROUND THRU-HOLES



CM - WALL MOUNT RECEPTACLE WITH METRIC CLINCH NUTS



CS - WALL MOUNT RECEPTACLE WITH STANDARD CLINCH NUTS





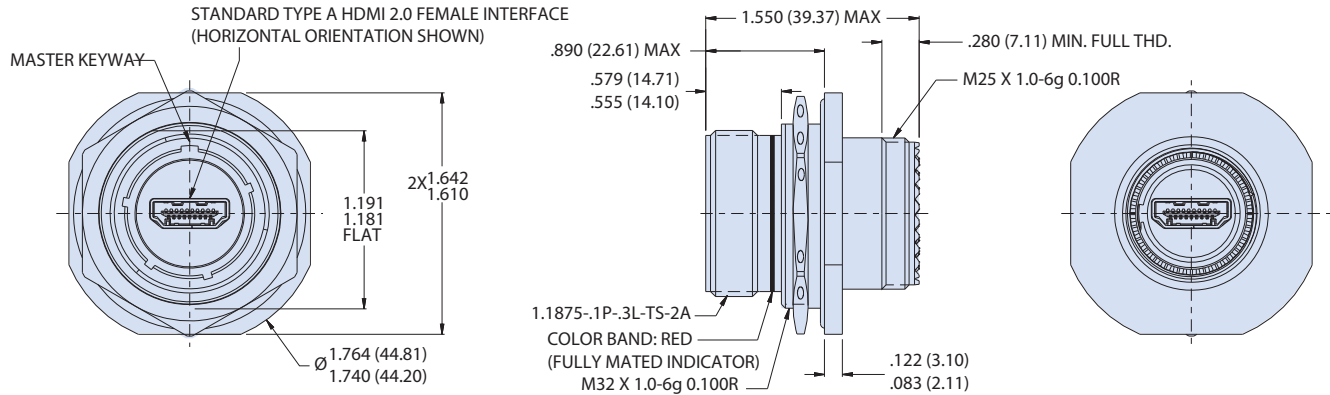
HDMI 2.0 CONNECTORS

MIL-DTL-38999 Series III Type Connectors

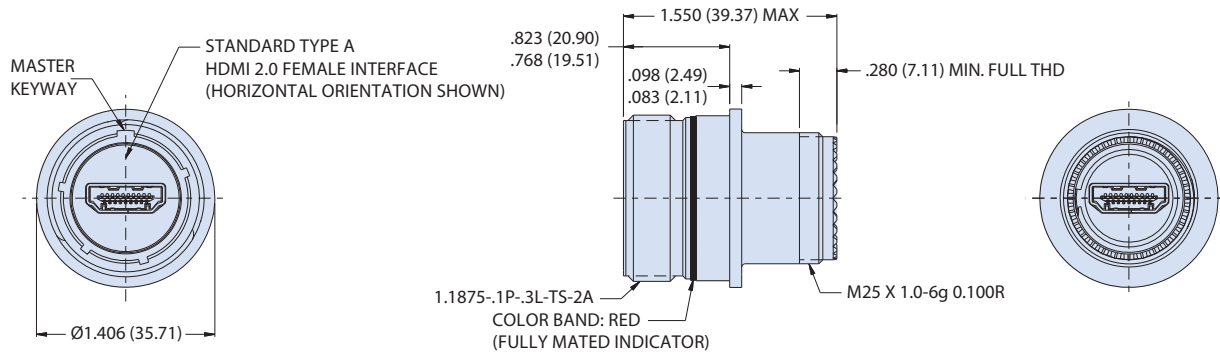


233-360 Panel mount couplers with accessory threads

07 - REAR PANEL MOUNT, JAM NUT RECEPTACLE



05 - CABLE RECEPTACLE





HDMI 2.0 CONNECTORS

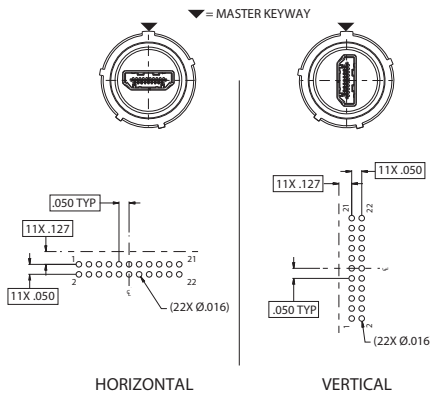
MIL-DTL-38999 Series III Type Connectors



233-362 Panel mount receptacles with PC tails



HDMI 2 FEMALE ORIENTATION OPTIONS PCB LAYOUT (SOLDER SIDE)



Part Number Development						
Sample Part Number	233-362	NF	00	-17	N	H
Basic Number	233-362					
Finish	See Material and Finish table					
Connector Style ¹	See Connector Style table					
Shell Size	17					
Alternate Key Position ¹	A, B, C, D, E, N = Normal per MIL-DTL-38999					
HDMI Orientation	H = Horizontal V = Vertical					
Shrink Boot	T = Part No. 770-028 (Omit for None)					

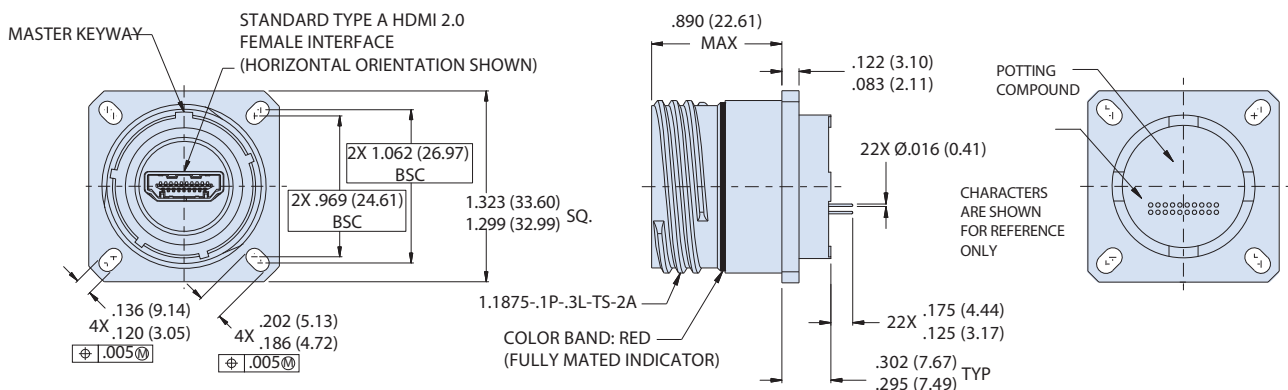
Material and Finish	
NF	Aluminum/Cadmium, Olive Drab
ME	Aluminum/Electroless Nickel
MT	Aluminum/Nickel PTFE
ZR	Aluminum/Black Zinc-Nickel
AB	Marine Bronze
XM	Composite/Electroless Nickel

Additional material / finish options available
consult factory

Connector Style	
00	Wall mount receptacle with slotted holes
D0	Wall mount receptacle with thru-holes
CM	Wall mount receptacle with metric clinch nuts
07	Rear panel mount, jam nut receptacle

*All external dimensions, features,
etc. compliant with D38999/20, /24,
&/26. Consult factory for additional
information.*

00 - WALL MOUNT RECEPTACLE WITH SLOTTED THRU-HOLES



NOTES

- See Section A for alternate key/keyway positions and panel cutout dimensions
- Meets IP67 in unmated condition, IP68 mated
- HDMI Type A female port, front and back
- Front panel mount only
- Material and Finish
 - Shell, jam nut: see material/finish table
 - Seals: silicone based elastomer
 - Hardware: stainless steel/passivated
- HDMI:
 - Housing: thermoplastic/NA
- Shell: copper alloy nickel plated
- Terminal: copper alloy/gold plated
- HDMI performance: design meets HDMI 2.0 protocol requirement including 18Gbps of bandwidth and supports 4K resolution and 60Hz



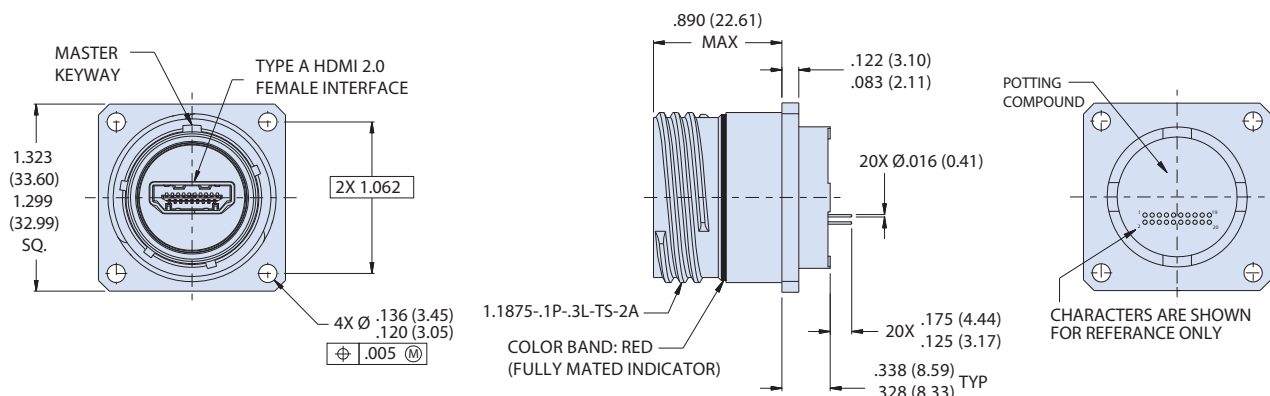
HDMI 2.0 CONNECTORS

MIL-DTL-38999 Series III Type Connectors

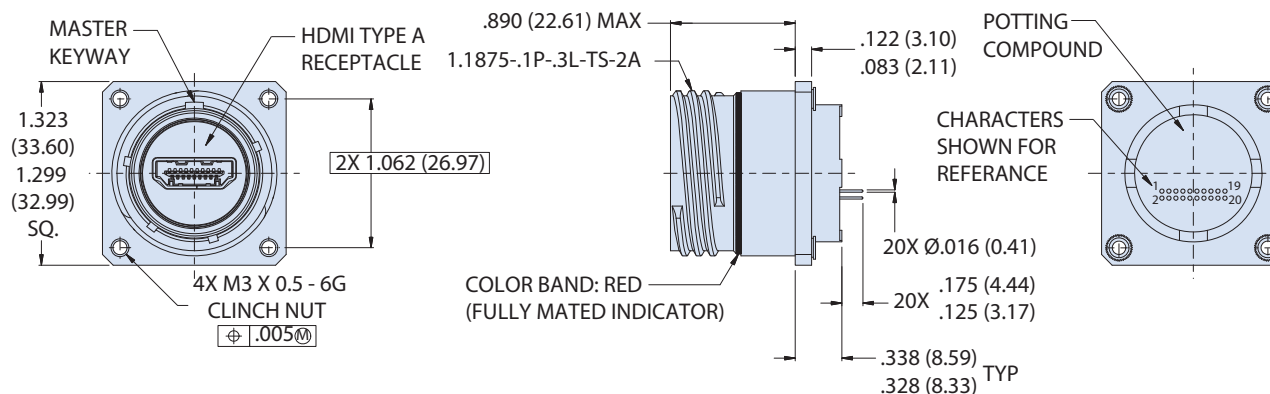


233-362 Panel mount receptacles with PC tails

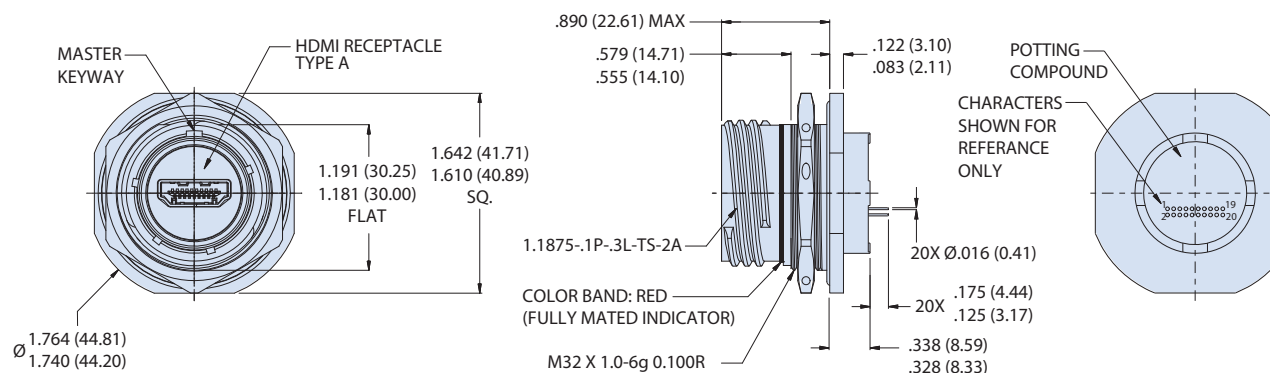
DO - WALL MOUNT RECEPTACLE WITH ROUND THRU-HOLES



CM - WALL MOUNT RECEPTACLE WITH METRIC CLINCH NUTS



07 - JAM-NUT MOUNT RECEPTACLE



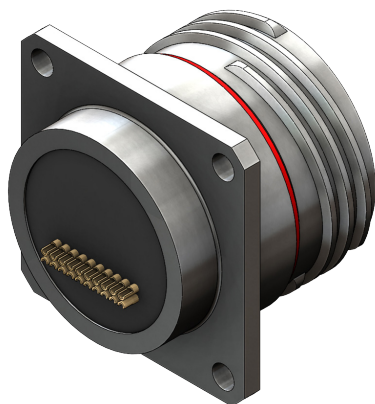


HDMI 2.0 CONNECTORS

MIL-DTL-38999 Series III Type Connectors



233-363 Panel mount connectors with solder cups



Part Number Development						
Sample Part Number	233-363	NF	00	-17	N	H
Basic Number	233-363					
Finish	See Material and Finish table					
Connector Style ¹	See Connector Style table					
Shell Size	17					
Alternate Key Position ¹	A, B, C, D, E, N = Normal per MIL-DTL-38999					
HDMI Orientation	H = Horizontal V = Vertical					

N

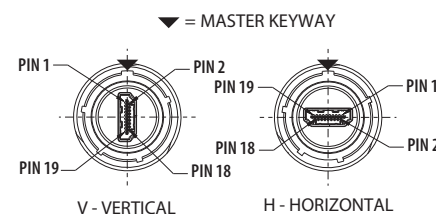
Material and Finish	
NF	Aluminum/Cadmium, Olive Drab
ME	Aluminum/Electroless Nickel
MT	Aluminum/Nickel PTFE
ZR	Aluminum/Black Zinc-Nickel
AB	Marine Bronze
XM	Composite/Electroless Nickel

Additional material / finish options available consult factory

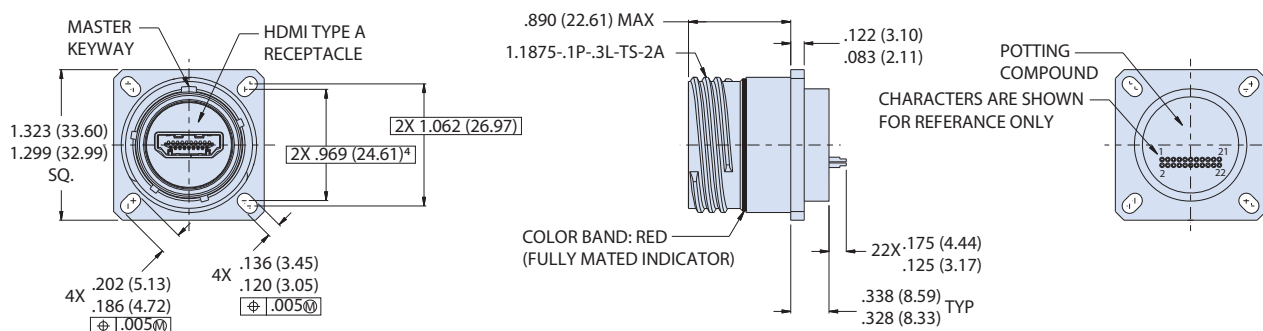
Connector Style	
00	Wall mount receptacle with slotted holes
D0	Wall mount receptacle with thru-holes
CM	Wall mount receptacle with metric clinch nuts
07	Rear panel mount, jam nut receptacle

All external dimensions, features, etc. compliant with D38999/20, /24, &/26. Consult factory for additional information.

HDMI 2 FEMALE ORIENTATION OPTIONS (PARTIAL FRONT VIEWS SHOWN)



00 - WALL MOUNT RECEPTACLE WITH SLOTTED THRU-HOLES



NOTES

- See Section A for alternate key/keyway positions and panel cutout dimensions
- Meets IP67 in unmated condition, IP68 mated
- HDMI Type A female port, front and back
- Front panel mount only
- Material and Finish
 - Shell, jam nut: see material finish table
 - Seals: silicone based elastomer
 - Hardware: stainless steel/passivated
- HDMI:
 - Housing: thermoplastic/NA
- Shell: copper alloy nickel plated
- Terminal: copper alloy/gold plated
- HDMI performance: design meets HDMI 2.0 protocol requirement including 18Gbps of bandwidth and supports 4K resolution and 60Hz



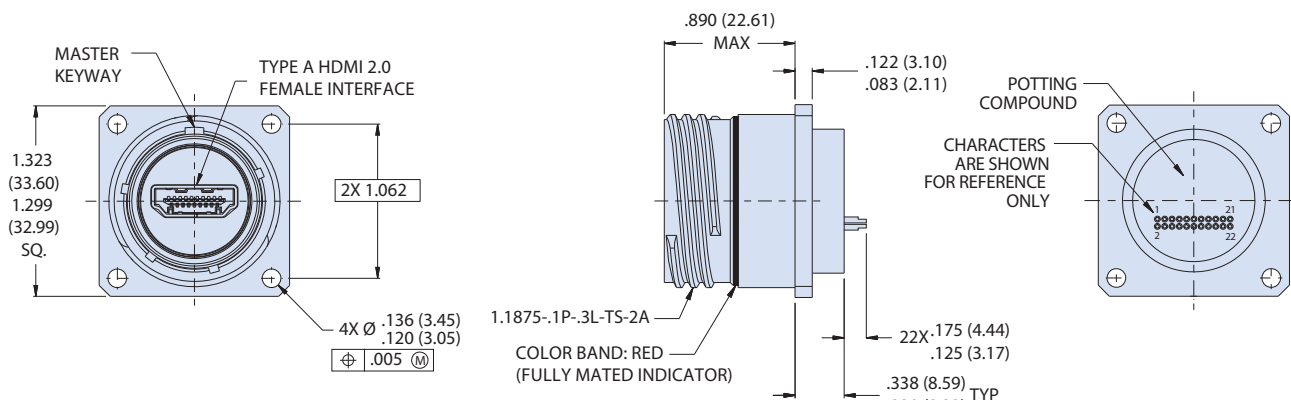
HDMI 2.0 CONNECTORS

MIL-DTL-38999 Series III Type Connectors

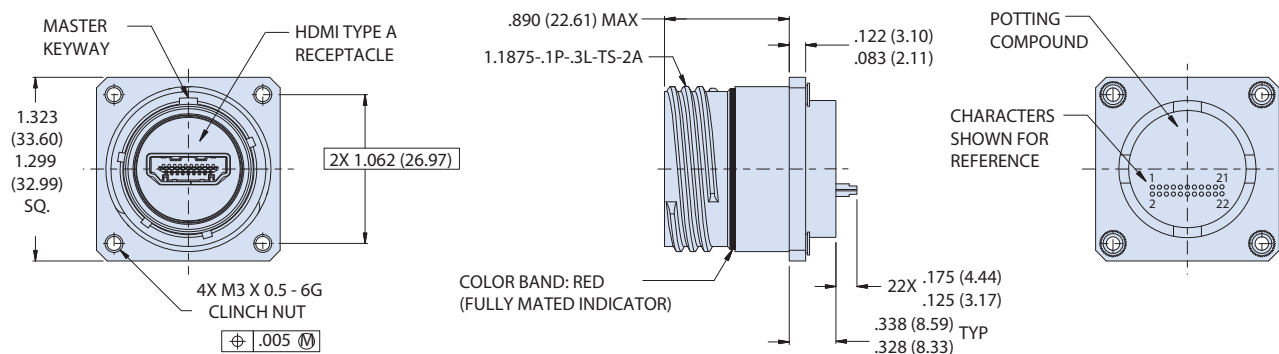


233-363 Panel mount receptacles with solder cups

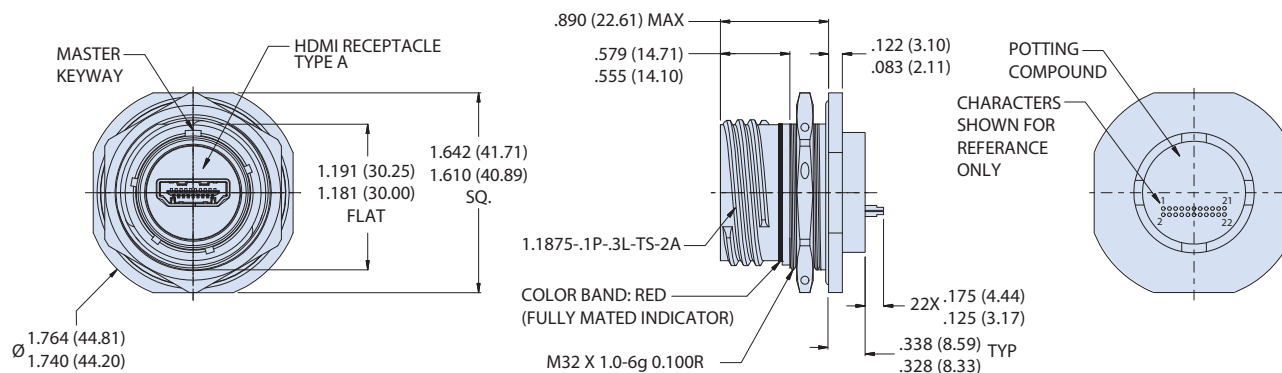
DO - WALL MOUNT RECEPTACLE WITH ROUND THRU-HOLES



CM - WALL MOUNT RECEPTACLE WITH METRIC CLINCH NUTS



07 - JAM-NUT MOUNT RECEPTACLE



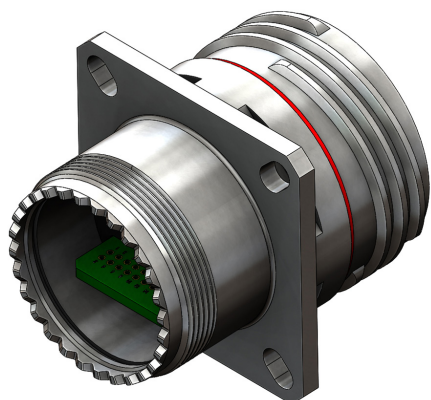


HDMI 2.0 CONNECTORS

MIL-DTL-38999 Series III Type Connectors



233-364 Panel mount receptacles with break-out board



Part Number Development						
Sample Part Number	233-364	NF	00	-17	N	H
Basic Number	233-364					
Finish	See Material and Finish table					
Connector Style ¹	See Connector Style table					
Shell Size	17					
Alternate Key Position ¹	A, B, C, D, E, N = Normal per MIL-DTL-38999					
HDMI Orientation	H = Horizontal V = Vertical					
Shrink Boot	T = Part No. 770-028 (Omit for None)					

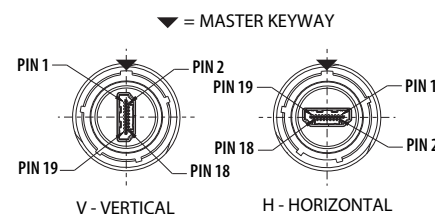
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Material and Finish	
NF	Aluminum/Cadmium, Olive Drab
ME	Aluminum/Electroless Nickel
MT	Aluminum/Nickel PTFE
ZR	Aluminum/Black Zinc-Nickel
AB	Marine Bronze
XM	Composite/Electroless Nickel

Additional material / finish options available consult factory

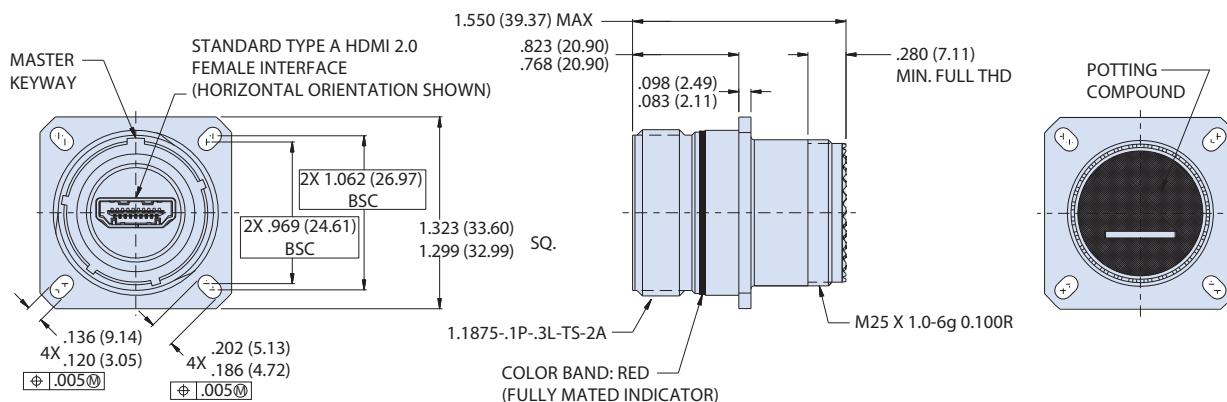
Connector Style	
00	Wall mount receptacle with slotted holes
D0	Wall mount receptacle with thru-holes
CM	Wall mount receptacle with metric clinch nuts
CS	Wall mount receptacle with standard clinch nuts
07	Rear panel mount, jam nut receptacle
05	Inline receptacle

HDMI 2 FEMALE ORIENTATION OPTIONS (PARTIAL FRONT VIEWS SHOWN)



All external dimensions, features, etc. compliant with D38999/20, /24, &/26. Consult factory for additional information.

00 - WALL MOUNT RECEPTACLE WITH SLOTTED THRU-HOLES



NOTES

- See Section A for alternate key/keyway positions and panel cutout dimensions
- Meets IP67 in unmated condition, IP68 mated
- HDMI Type A female port, front and back
- Front panel mount only
- Material and Finish
 - Shell, jam nut: see material finish table
 - Seals: silicone based elastomer
 - Hardware: stainless steel/passivated
- HDMI:
 - Housing: thermoplastic/NA
- Shell: copper alloy nickel plated
- Terminal: copper alloy/gold plated
- HDMI performance: design meets HDMI 2.0 protocol requirement including 18Gbps of bandwidth and supports 4K resolution and 60Hz



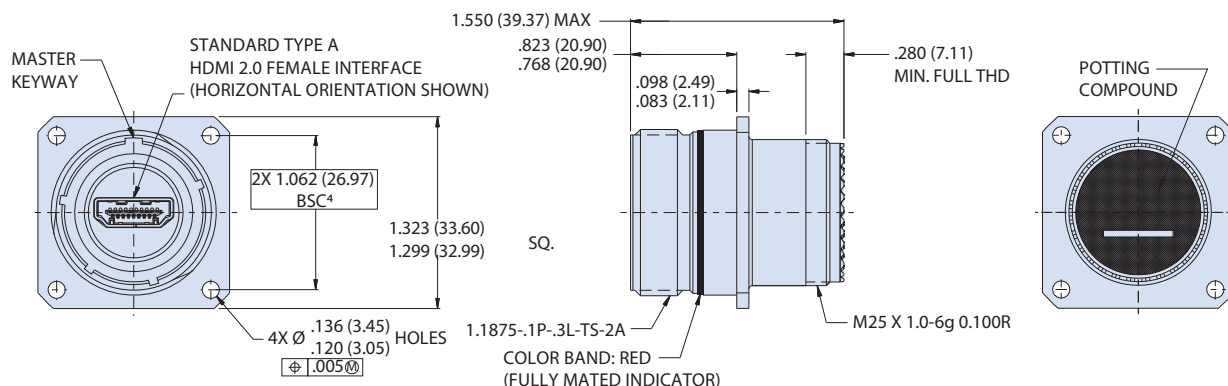
HDMI 2.0 CONNECTORS

MIL-DTL-38999 Series III Type Connectors

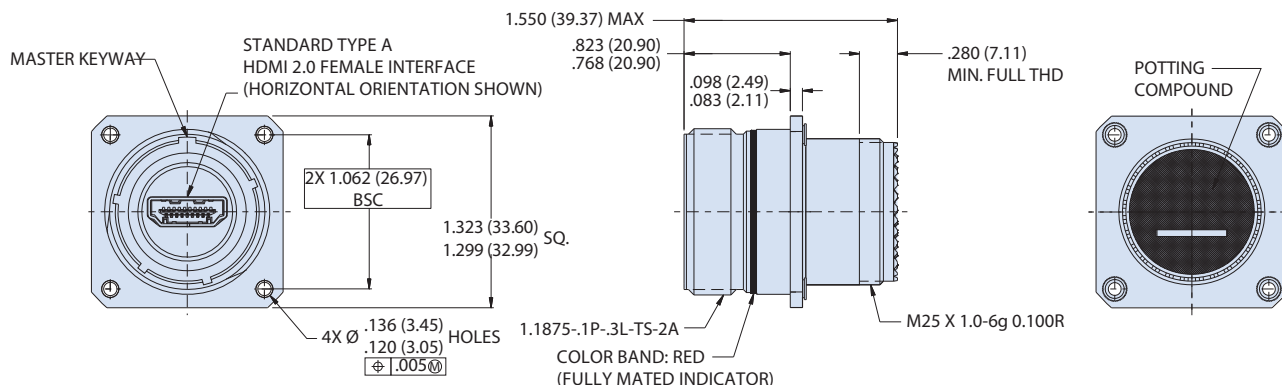


233-364 Panel mount receptacles with break-out board

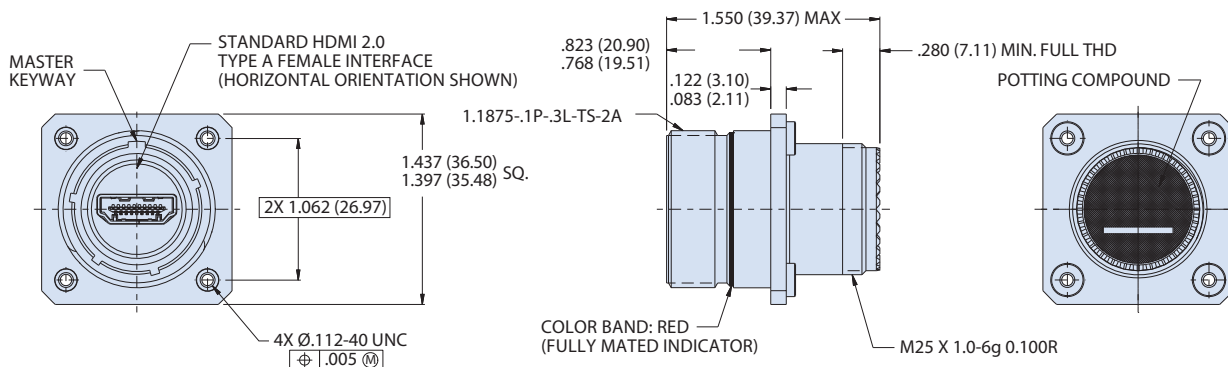
DO - WALL MOUNT RECEPTACLE WITH ROUND THRU-HOLES



CM - WALL MOUNT RECEPTACLE WITH METRIC CLINCH NUTS



CS - WALL MOUNT RECEPTACLE WITH STANDARD CLINCH NUTS





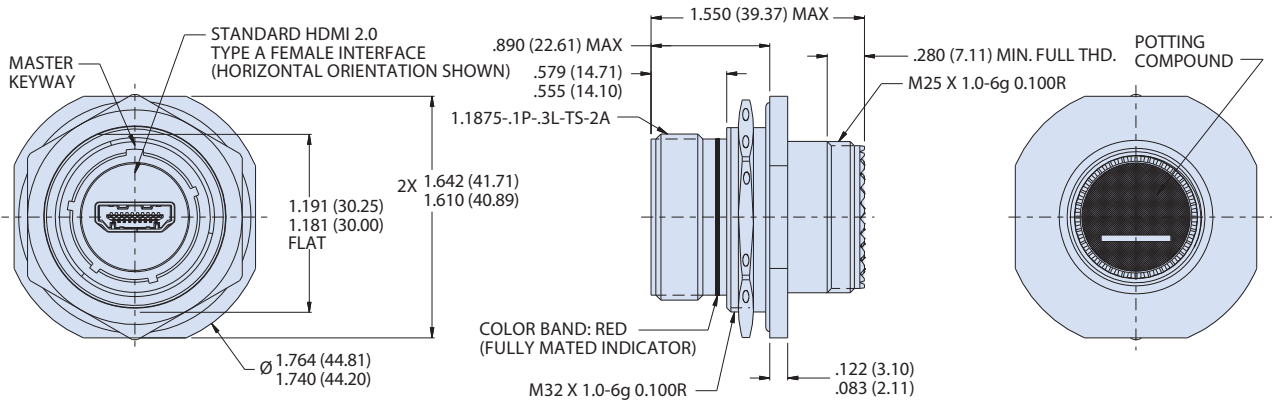
HDMI 2.0 CONNECTORS

MIL-DTL-38999 Series III Type Connectors

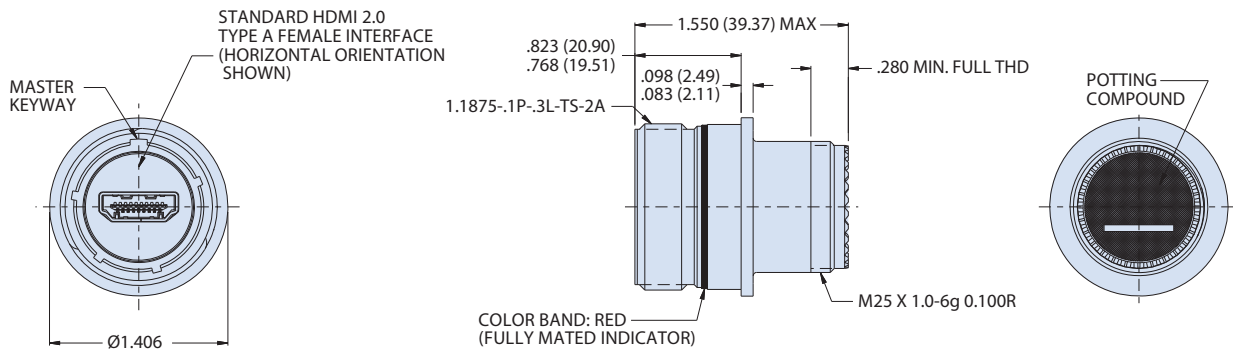


233-364 Panel mount receptacles with break out board

07 - REAR PANEL MOUNT, JAM NUT RECEPTACLE



05 - CABLE RECEPTACLE





HDMI 2.0 CONNECTORS

MIL-DTL-38999 Series III Type Connectors

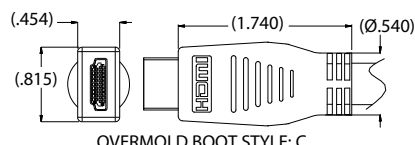


233-368 Plug, accepts HDMI Plug

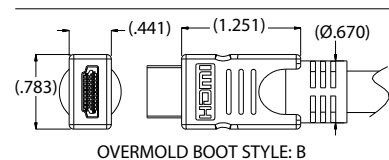
N



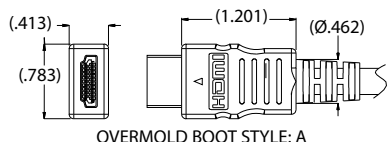
Part Number Development							
Sample Part Number	233-368	NF	G6	A	17	N	H
Basic Number	233-368						
Finish	See Material and Finish table						
Connector Style ¹	G6 = Plug						
Overmold Style	A, B, C						
Shell Size	17						
Alternate Key Position ¹	A, B, C, D, E, N = Normal per MIL-DTL-38999						
HDMI Orientation	H = Horizontal V = Vertical						



OVERMOLD BOOT STYLE: C



OVERMOLD BOOT STYLE: B



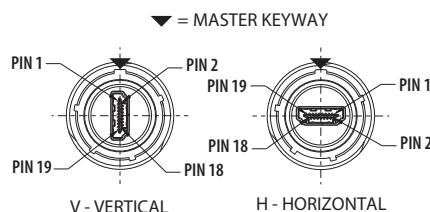
OVERMOLD BOOT STYLE: A

Material and Finish	
NF	Aluminum/Cadmium, Olive Drab (500 hour salt spray)
ME	Aluminum/Electroless Nickel
MT	Aluminum/Nickel PTFE
ZR	Aluminum/Black Zinc-Nickel (Tri-valent CR)
AB	Marine Bronze
XM	Composite/Electroless Nickel

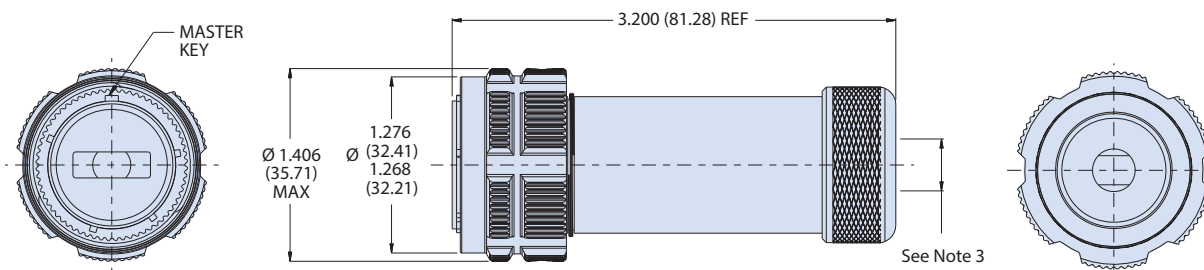
Additional material / finish options available consult factory

All external dimensions, features, etc. compliant with D38999/20, /24, &/26. Consult factory for additional information.

HDMI 2 FEMALE ORIENTATION OPTIONS (PARTIAL FRONT VIEWS SHOWN)



G6 - PLUG



NOTES

- See Section A for alternate key/keyway positions and panel cutout dimensions
- Meets IP67 in unmated condition, IP68 mated
- Design accommodates cable outside diameter .280 (7.112) nominal
- Accommodates HDMI patch cords with standard plug interface
- Material and Finish
 - Shell, jam nut: see material finish table
 - Seals: silicone based elastomer
 - Hardware: stainless steel/passivated
- HDMI:
 - Housing: thermoplastic/NA
 - Shell: copper alloy nickel plated
 - Terminal: copper alloy/gold plated



HDMI 2.0 CONNECTORS

MIL-DTL-38999 Series III Type Connectors

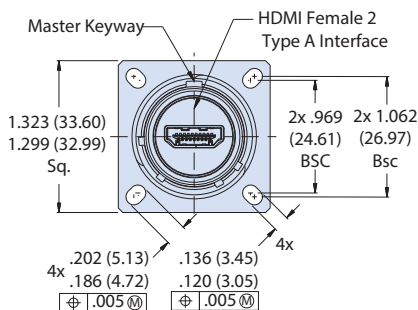


2330-0455 Cable assembly with commercial HDMI 2.0

Part Number Development						
Sample Part Number	2330-0455	M	07	-17	N	H -X
Series / Basic Part No.	2330-0455					
P1 Material/Finish	NF = Aluminum/cadmium olive drab ME = Aluminum/electroless nickel MT = Aluminum/nickel PTFE ZR = Aluminum/zinc-nickel					
P1 Connector Style	00 = Wall mount receptacle with slotted holes D0 = Wall mount receptacle with round holes 07 = Jam-nut receptacle G6 = Plug					
Shell Size	17					
Alternate Polarization	A, B, C, D, E, N = Normal; Per MIL-DTL-38999					
HDMI Orientation	H = Horizontal V = Vertical					
Overall Length	Provided in 1 foot increments; 01 - 1.0 ft					

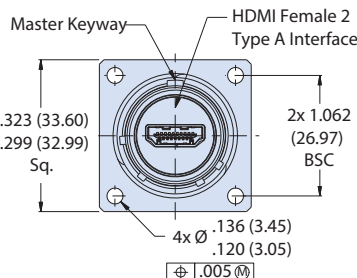
N

00 - Wall Mount Receptacle
With Slotted Holes



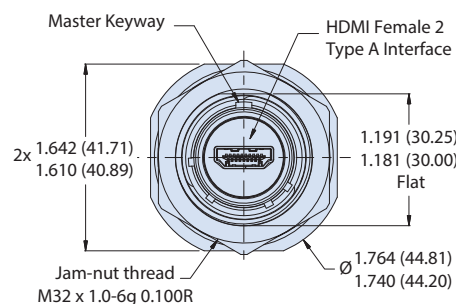
(Horizontal Orientation Shown)

D0 - Wall Mount Receptacle
With Round Holes

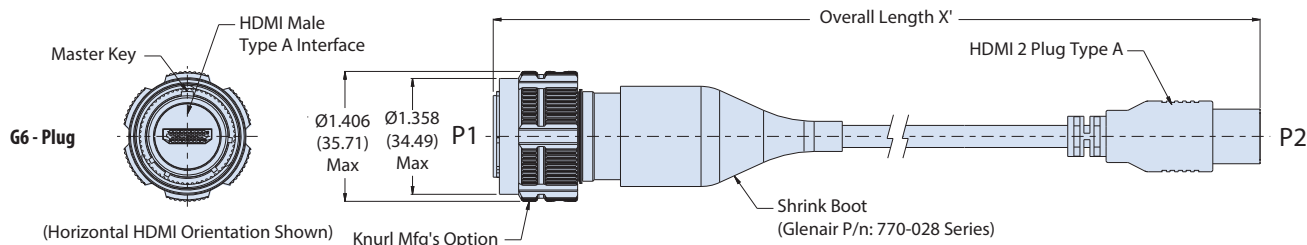
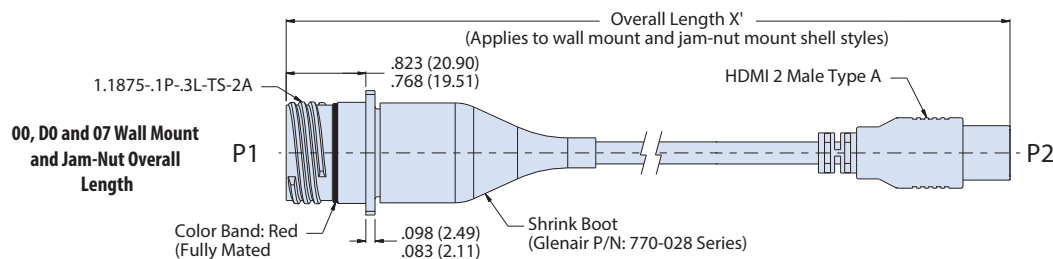


(Horizontal Orientation Shown)

07 - Jam Nut Receptacle



(Horizontal Orientation Shown)



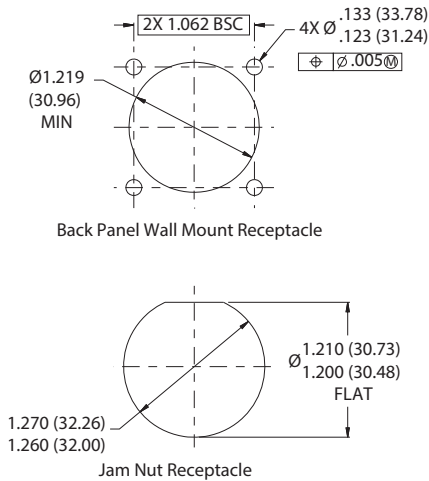
SuperNine® Datalink connectors

2330-0455 Cable assembly with HDMI 2

MIL-DTL-38999 Series III



Recommended Mounting Holes & Cut Outs



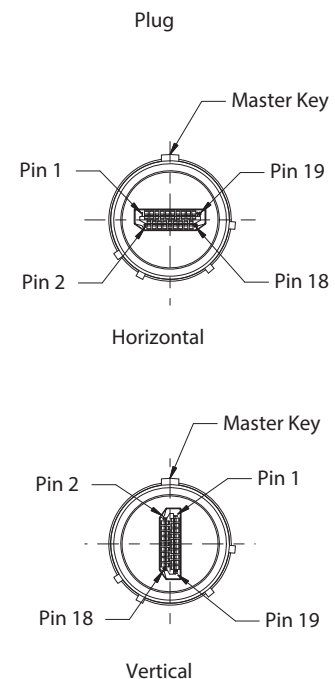
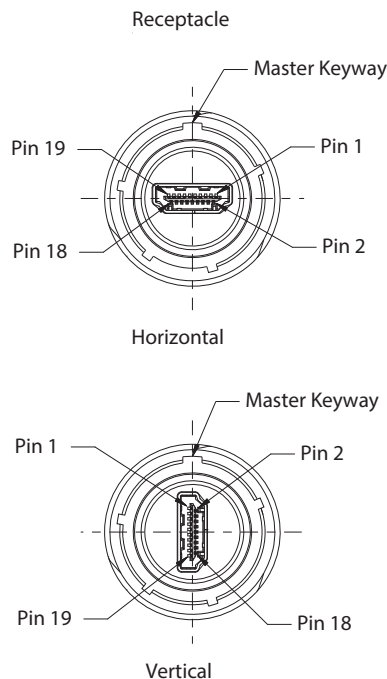
HDMI 2, Connector Pin Assignments			
Pin	Signal	Pin	Signal
1	TMDS DATA2+	11	TMDS CLOCK SHIELD
2	TMDS DATA2 SHIELD	12	TMDS CLOCK-
3	TMDS DATA2-	13	CEC
4	TMDS DATA1+	14	UTILITY
5	TMDS DATA1 SHIELD	15	SCL
6	TMDS DATA1-	16	SDA
7	TMDS DATA0+	17	DDC/CEC GROUND
8	TMDS DATA0 SHIELD	18	+5V POWER
9	TMDS DATA0-	19	HOT PLUG DETECT
10	TMDS CLOCK+		

HDMI 2 ORIENTATION OPTIONS (PARTIAL FRONT VIEWS SHOWN)

NOTES

- Material/finish
 - Shell, jam-nut, barrel: see part number development
 - Insulators: high grade rigid dielectric/N.A.
 - Contacts: copper alloy, gold plated
 - Seals: silicone based elastomer
 - HDMI (shell/contacts): copper alloy
 - Dielectric: thermoplastic PA9T UL94V-0
 - Hardware: stainless steel/passivated
- HDMI specifications:
 - Performance:*
 - HDMI 2
 - Electrical:*
 - Current rating: 0.5 amps min
 - DWV: 300 Vac
 - I.R.: 100 Meg Ohms min.
 - Operating temperature range: -20°C to +85°C
- Connector interface (P1) per MIL-DTL-38999, Series III, Shell size 17
- Connector front interface with HDMI Type A male is designed to mate with HDMI receptacle patch cord or Glenair HDMI receptacle connector 2330-0441

Connector front interface with HDMI Type A female is designed to mate with HDMI male patch cord





HDMI 2.0 CONNECTORS

MIL-DTL-38999 Series III Type Connectors



233-367 HDMI to PC Tail connector receptacle with standoffs



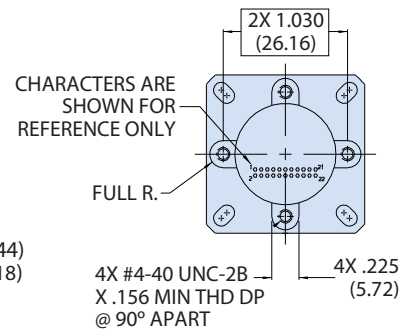
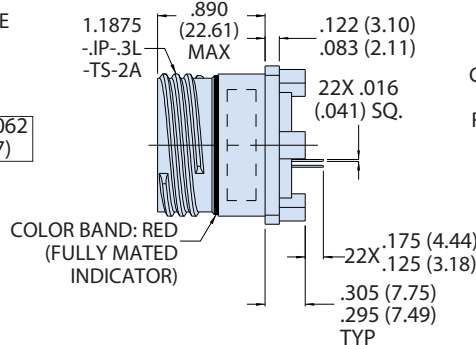
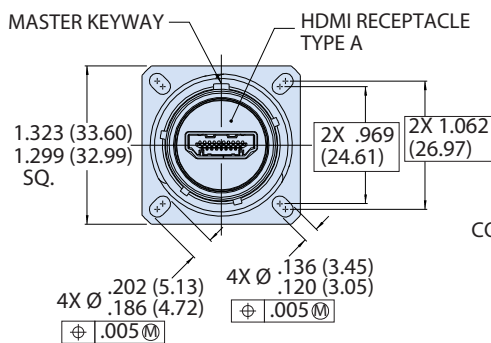
Part Number Development						
Sample Part Number	233-367	NF	00	-17	N	H
Basic Number	233-367					
Finish	See Material and Finish table					
Connector Style	See Connector Style table					
Shell Size	17					
Alternate Key Position ¹	A, B, C, D, E, N = Normal per MIL-DTL-38999					
HDMI Orientation	H = Horizontal V = Vertical					

Material and Finish		
NF	Aluminum	Cadmium, Olive Drab Over Electroless Nickel (500 Hour Salt Spray)
ME		Electroless Nickel (96 Hour Salt Spray)
ZR		Black Zinc-Nickel (Tri-Valent CR)
XM	Composite	Electroless Nickel
Z1	Stainless Steel	Passivate
AB	Marine Bronze	None (Clean Only)

Additional material / finish options available consult factory

Connector Style	
00	Wall mount receptacle with slotted holes
D0	Wall mount receptacle with round holes
CM	Wall mount receptacle with metric clinch nuts
07	Rear panel mount, jam nut receptacle

DO - WALL MOUNT RECEPTACLE WITH SLOTTED HOLES



NOTES

- HDMI Performance: Design meets HDMI 2.0 protocol requirement including 18Gbps of bandwidth and supports 4K resolution and 60Hz.
- Receptacle connector designed to meet IP67 unmated condition.
- HDMI Specifications
 - Performance: See Note 1
 - DWV: 300VAC
 - IR: 100 Mega Ohms MIN
 - Operating Temperature: -20°C to +85°C
- Material and Finish
 - Shell, jam nut: see material finish table
 - Seals: silicone based elastomer
- Hardware: stainless steel/passivated
- HDMI:
 - Housing: thermoplastic/NA
 - Shell: copper alloy nickel plated
 - Terminal: copper alloy/gold plated



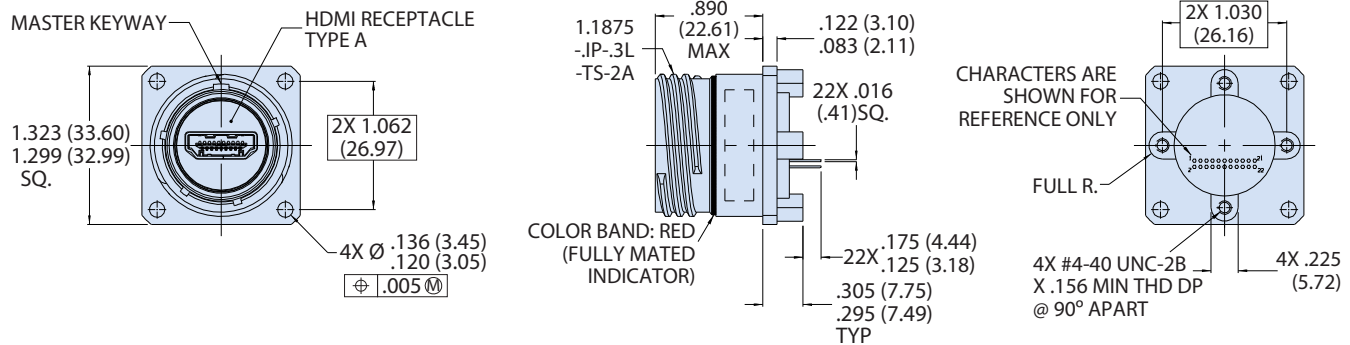
HDMI 2.0 CONNECTORS

MIL-DTL-38999 Series III Type Connectors

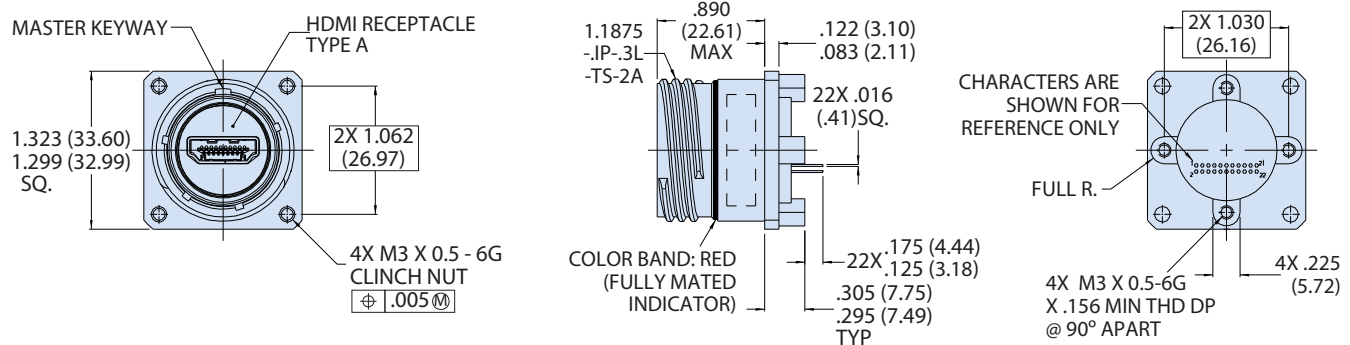


233-367 HDMI to PC Tail connector receptacle with standoffs

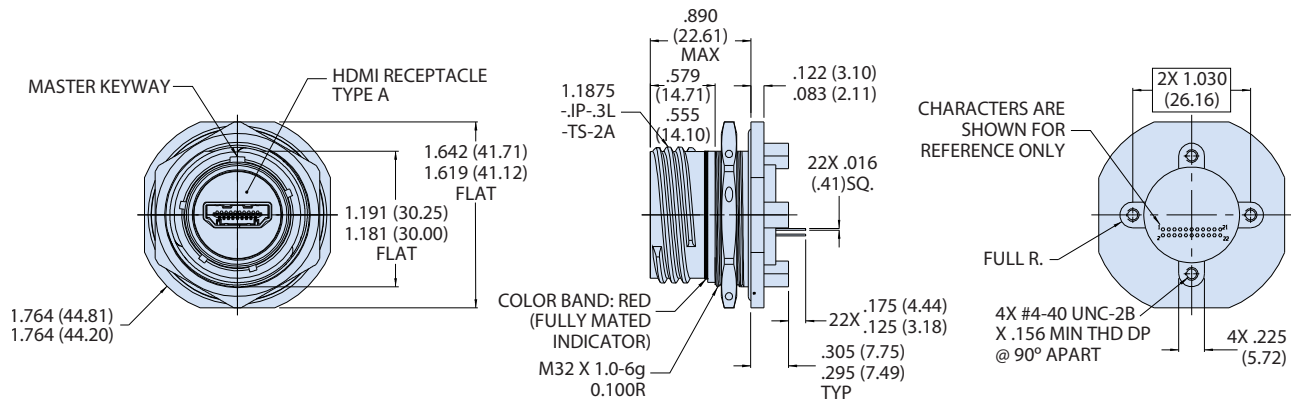
DO - WALL MOUNT RECEPTACLE WITH ROUND HOLES



CM - WALL MOUNT RECEPTACLE WITH METRIC CLINCH NUTS



07 - JAM NUT MOUNT RECEPTACLE



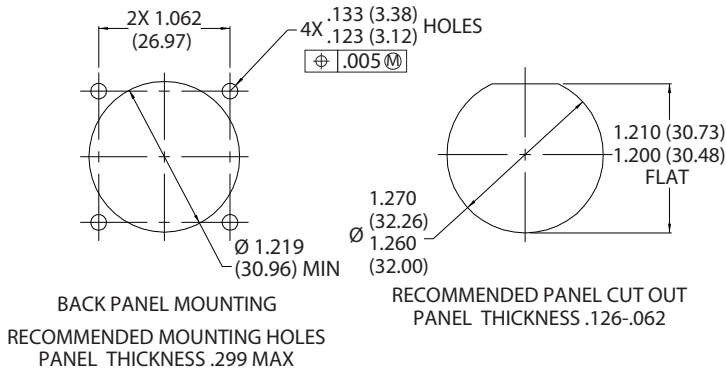


HDMI 2.0 CONNECTORS

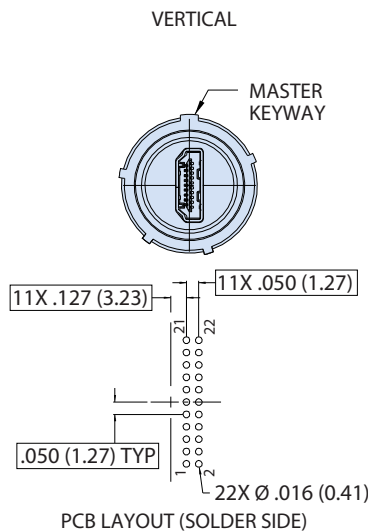
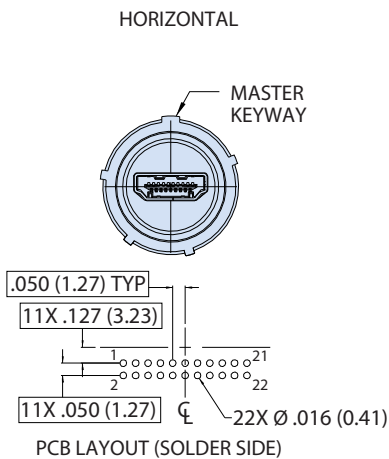
MIL-DTL-38999 Series III Type Connectors



233-367 HDMI to PC Tail connector receptacle with standoffs



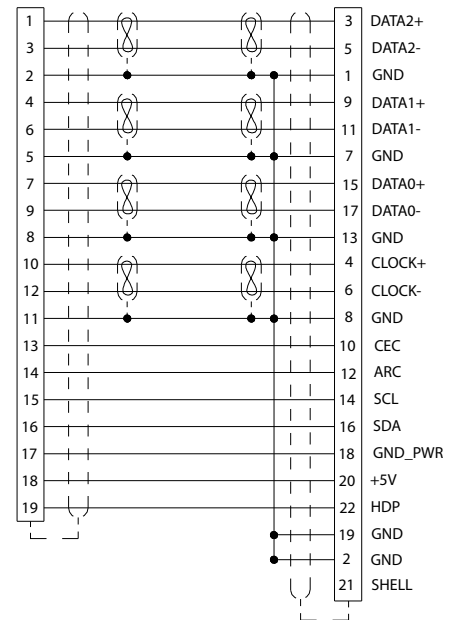
HDMI ORIENTATION OPTIONS (PARTIAL VIEWS SHOWN)



WIRING DIAGRAM

HDMI (FRONT INTERFACE)

PC TAIL (BACK INTERFACE)





DISPLAYPORT

MIL-DTL-38999 Series III Type Connectors



233-376 Connector receptacle with shielded DisplayPort coupler

N

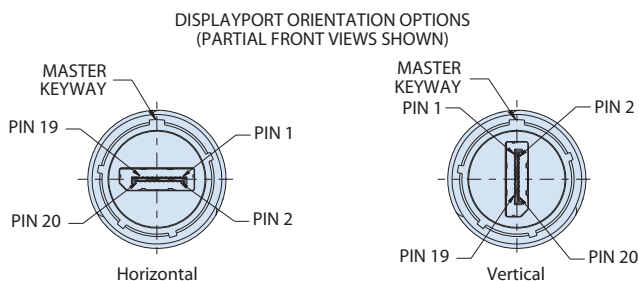
Part Number Development						
Sample Part Number	233-376	NF	00	-17	N	H
Basic Number	233-376					
Finish	See Material and Finish table					
Connector Style	See Connector Style table					
Shell Size	17					
Alternate Key Position	A, B, C, D, E, N = Normal per MIL-DTL-38999					
DisplayPort Orientation	H = Horizontal V = Vertical					

Material and Finish		
NF	Aluminum	Cadmium, Olive Drab Over Electroless Nickel (500 Hour Salt Spray)
ME		Electroless Nickel (96 Hour Salt Spray)
ZR		Black Zinc-Nickel (Tri-Valent CR)
XM	Composite	Electroless Nickel
Z1	Stainless Steel	Passivate
AB	Marine Bronze	None (Clean Only)

Additional material / finish options available consult factory

Wiring Diagram					
Signal Name	P1	P2	Signal Name	P1	P2
ML_LANE 0(p)	1	1	ML_LANE 3(n)	12	12
ML_LANE 0(n)	3	3	GND	11	11
GND	2	2	CONFIG1	13	13
ML_LANE 1(p)	4	4	CONFIG2	14	14
ML_LANE 1(n)	6	6	AUX CH(p)	15	15
GND	5	5	AUX CH(n)	17	17
ML_LANE 2(p)	7	7	GND	16	16
ML_LANE 2(n)	9	9	Hot Plug Detect	18	18
GND	8	8	DP_PWR Return	19	19
ML_LANE 3(p)	10	10	DP_PWR	20	20

Connector Style	
00	Wall mount receptacle with slotted holes
D0	Wall mount receptacle with round holes
CM	Wall mount receptacle with metric clinch nuts
CS	Wall mount receptacle with standard clinch nuts
07	Rear panel mount, jam nut receptacle
05	Rear panel mount, inline receptacle



NOTES

- Interpret drawing per ASME Y14.5 - 2009.
- Modified major diameter 31.80 - 31.95 (1.252 - 1.257).
- Material/finishes:
 - Shell, jam nut: see Material/Finish table
 - (Composite coupling nut no plating required).
 - Seals: silicone based elastomer
 - Hardware: stainless steel/passivated
- Displayport
 - Housing: thermoplastic/N.A.
 - Shell: copper alloy/nickel plated
 - Terminal: copper alloy/ gold plated
- Displayport specifications:
 - Performance: see note 8.
 - D.W.V.: 500 VAC (unmated)
 - I.R.: 100 Mega ohms min.
 - Operating temperature range: -20°C to +85°C
- Front panel mount only.
- Receptacle connector designed to meet IP67 unmated condition.
- Performance: design meets displayport 1.4 Benchmark data transfer rate requirements.



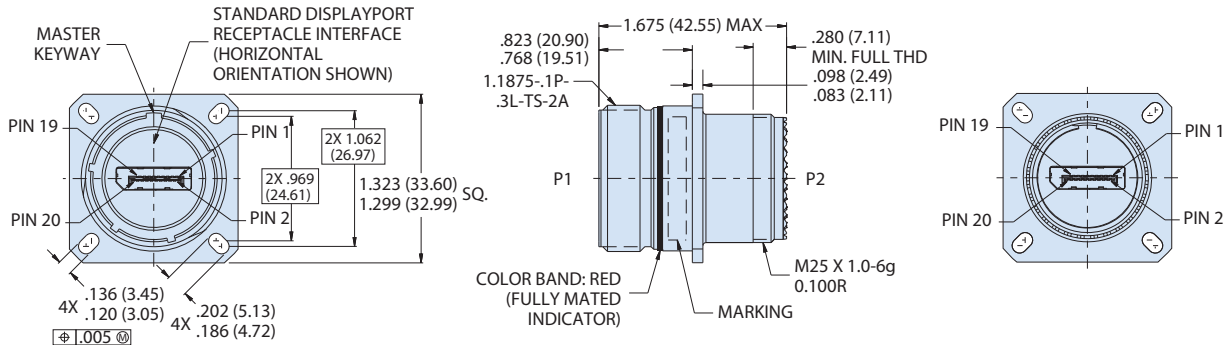
DISPLAYPORT

MIL-DTL-38999 Series III Type Connectors

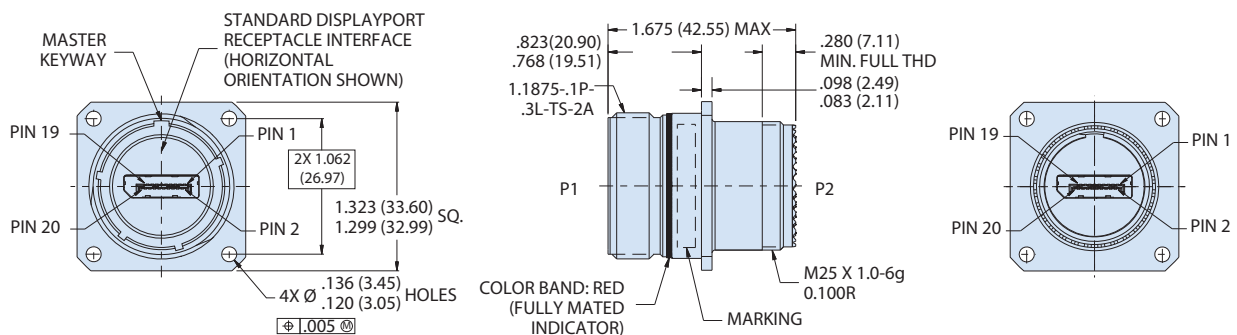


233-376 Connector receptacle with shielded DisplayPort coupler

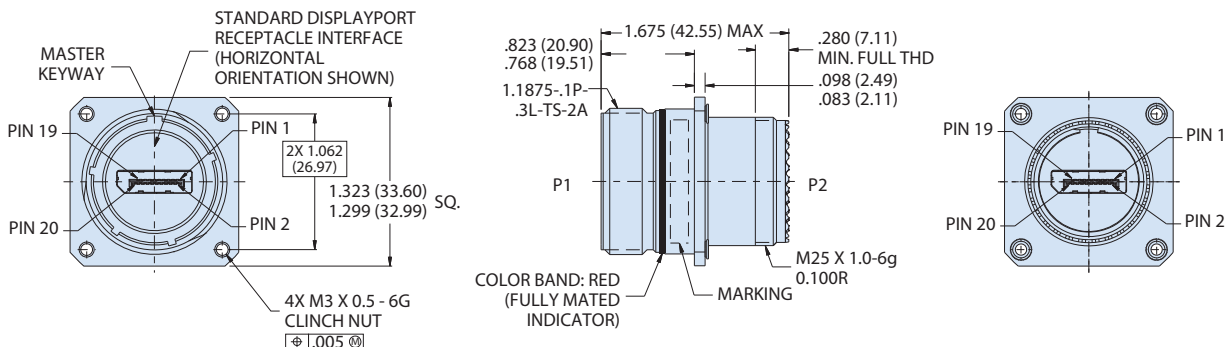
00 - WALL MOUNT RECEPTACLE WITH SLOTTED HOLES



DO - WALL MOUNT RECEPTACLE WITH ROUND HOLES



CM - WALL MOUNT RECEPTACLE WITH METRIC CLINCH NUTS





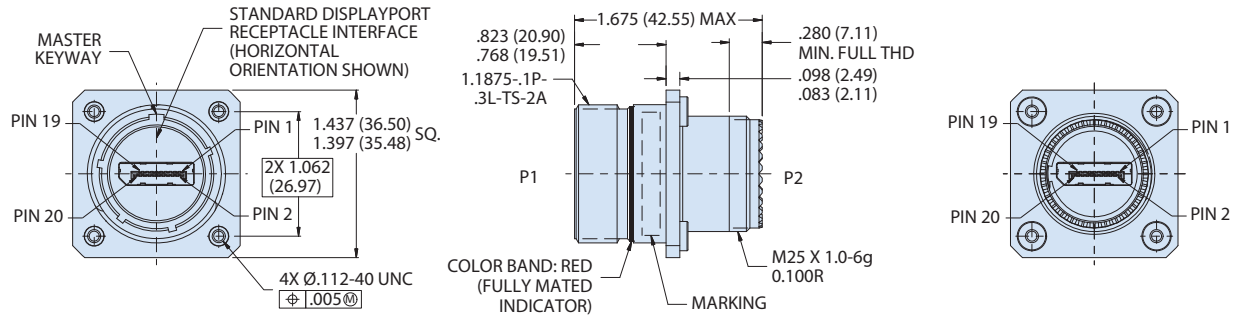
DISPLAYPORT

MIL-DTL-38999 Series III Type Connectors

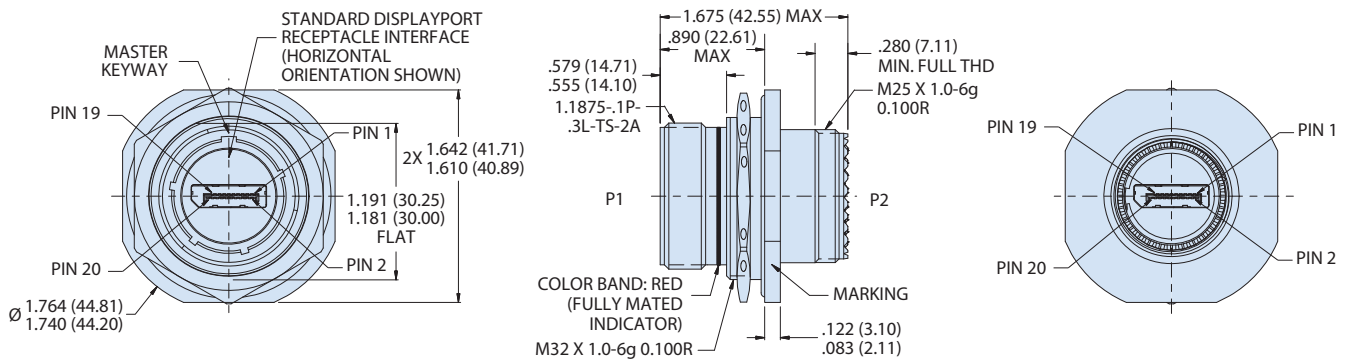


233-376 Connector receptacle with shielded DisplayPort coupler

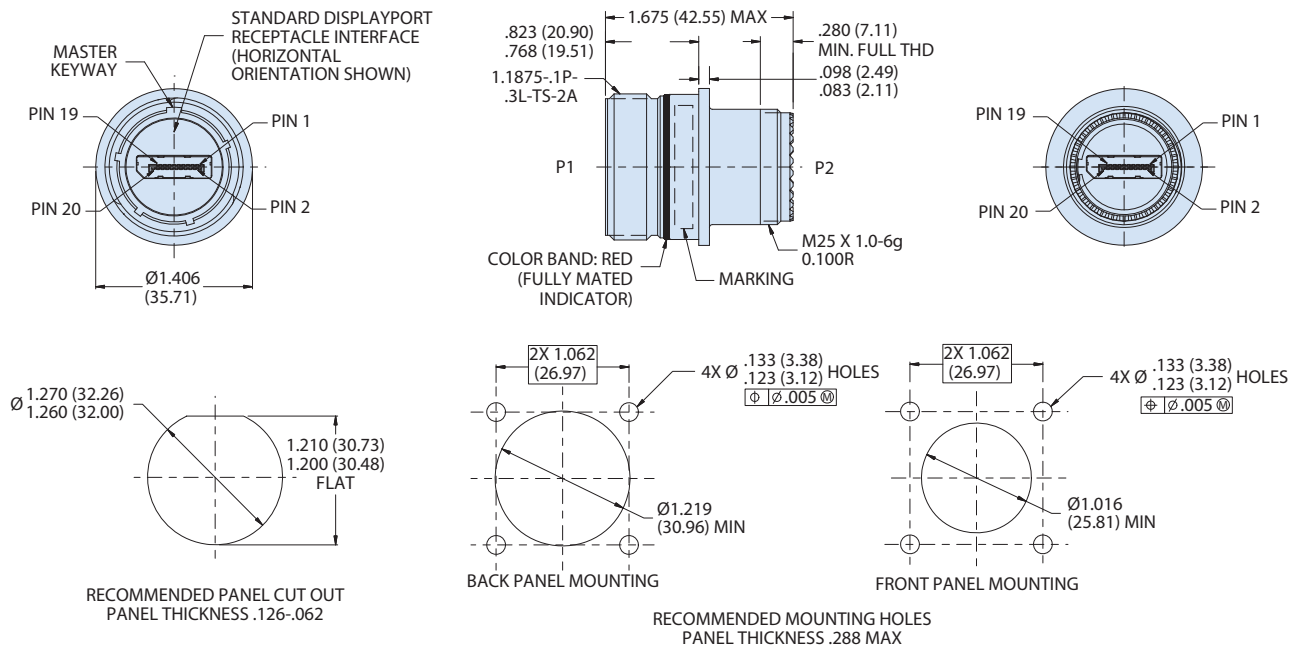
CS - WALL MOUNT RECEPTACLE WITH STANDARD CLINCH NUTS



07 - JAM NUT MOUNT RECEPTACLE



05 - INLINE RECEPTACLE





DISPLAYPORT

MIL-DTL-38999 Series III Type Connectors



233-379 Connector receptacle with DisplayPort to PC tail termination



Part Number Development						
Sample Part Number	233-379	NF	00	-17	N	H
Basic Number	233-379					
Finish	See Material and Finish table					
Connector Style	See Connector Style table					
Shell Size	17					
Alternate Key Position	A, B, C, D, E, N = Normal per MIL-DTL-38999					
DisplayPort Orientation	H = Horizontal V = Vertical					

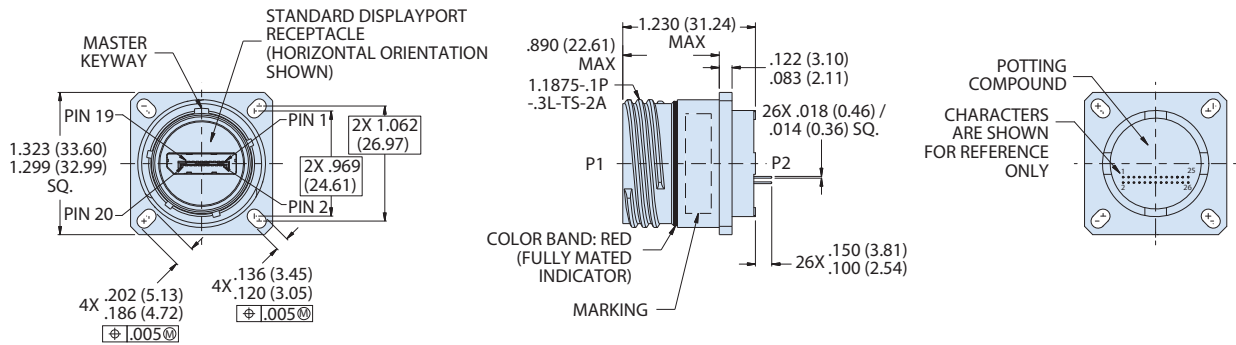
N

Material and Finish		
NF	Aluminum	Cadmium, Olive Drab Over Electroless Nickel (500 Hour Salt Spray)
ME		Electroless Nickel (96 Hour Salt Spray)
ZR		Black Zinc-Nickel (Tri-Valent CR)
XM		Electroless Nickel
ZI	Stainless Steel	Passivate
AB	Marine Bronze	None (Clean Only)

Additional material / finish options available consult factory

Connector Style	
00	Wall mount receptacle with slotted holes
D0	Wall mount receptacle with round holes
CM	Wall mount receptacle with metric clinch nuts
CS	Wall mount receptacle with standard clinch nuts
07	Rear panel mount, jam nut receptacle

00 - WALL MOUNT RECEPTACLE WITH SLOTTED HOLES



NOTES

- Interpret drawing per ASME Y14.5 - 2009.
- Modified major diameter 31.80 - 31.95 (1.252 - 1.257).
- Material/finishes:
 - Shell, jam nut: see Material/Finish table
 - (Composite coupling nut no plating required).
 - Seals: silicone based elastomer
 - Hardware: stainless steel/passivated
- Displayport
 - Housing: thermoplastic/N.A.
 - Shell: copper alloy/nickel plated
 - Terminal: copper alloy/ gold plated
- Displayport specifications:
 - Performance: see note 8.
 - D.W.V.: 500 VAC (unmated)
 - I.R.: 100 Mega ohms min.
 - Operating temperature range: -20°C to +85°C
- Front panel mount only.
- Receptacle connector designed to meet IP68 unmated condition.
- Performance: design meets displayport 1.4 benchmark data transfer rate requirements.



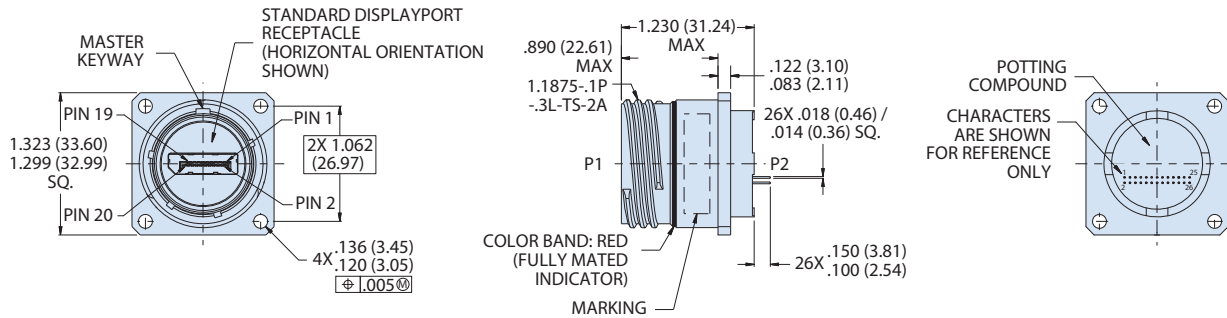
DISPLAYPORT

MIL-DTL-38999 Series III Type Connectors

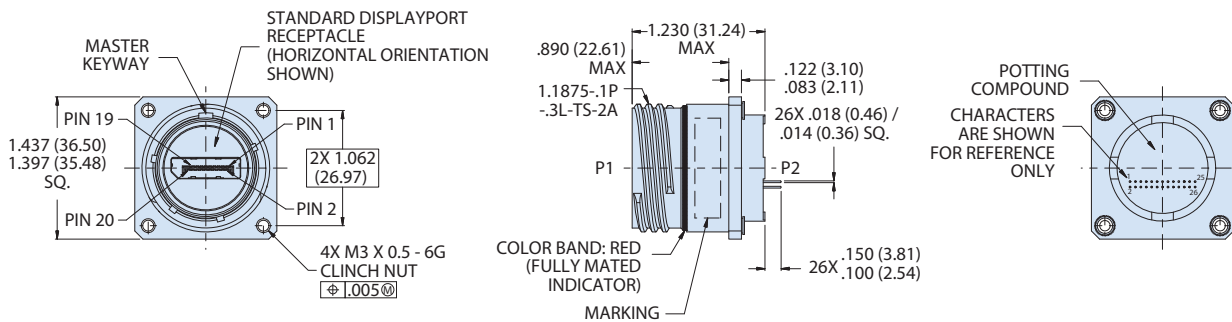


233-379 Connector receptacle with DisplayPort to PC tail termination

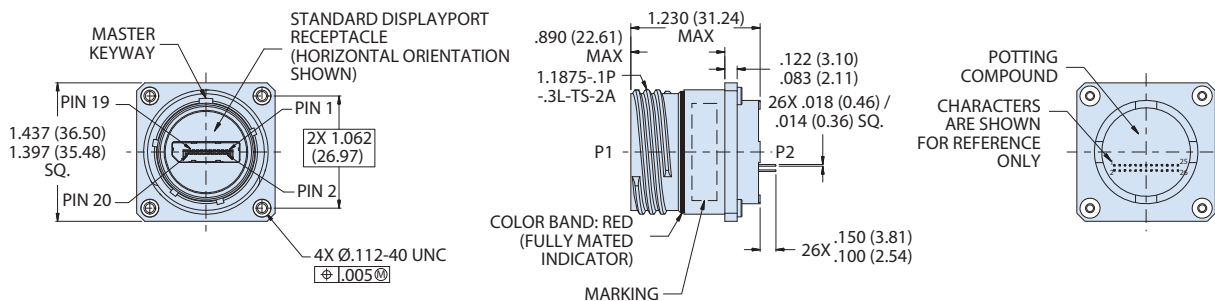
DO - WALL MOUNT RECEPTACLE WITH ROUND HOLES



CM - WALL MOUNT RECEPTACLE WITH METRIC CLINCH NUTS



CS - WALL MOUNT RECEPTACLE WITH STANDARD CLINCH NUTS





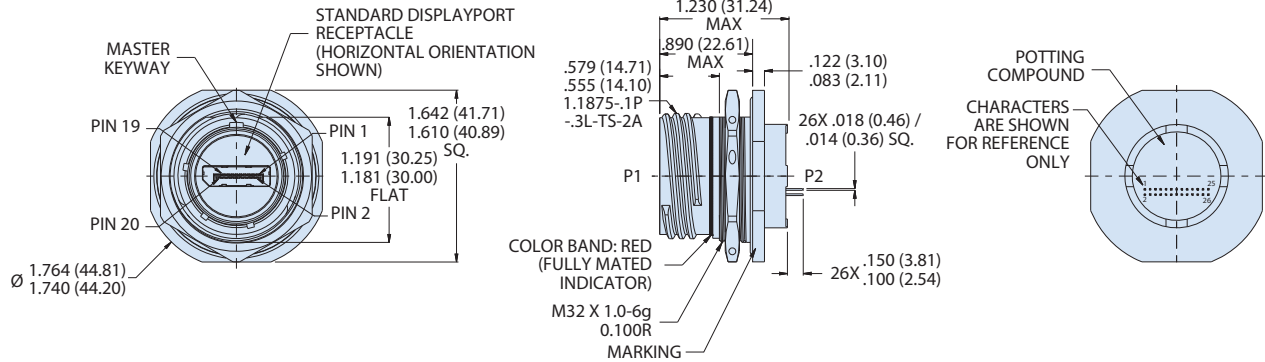
DISPLAYPORT

MIL-DTL-38999 Series III Type Connectors



233-379 Connector receptacle with DisplayPort to PC tail termination

07 - JAM NUT MOUNT RECEPTACLE

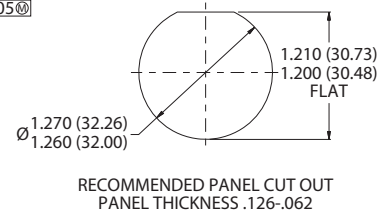
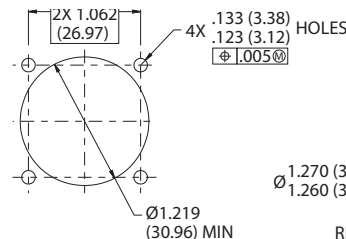
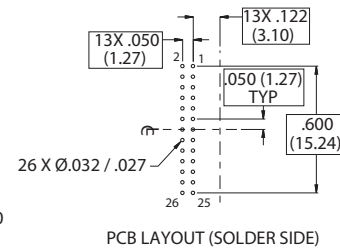
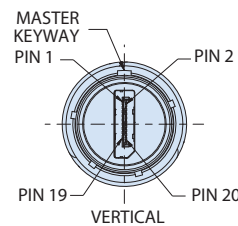
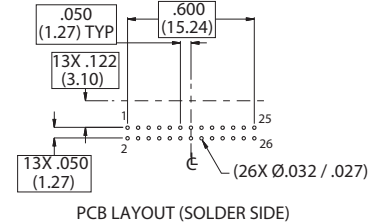
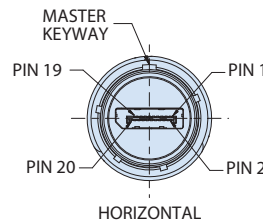


WIRING DIAGRAM

SIGNAL NAME	P1 (DP CONNECTOR SIDE)	P2 (PCB SIDE)
ML_LANE 0(p)	1	3 ML_LANE 0(p)
ML_LANE 0(n)	3	7 ML_LANE 0(n)
GND	2	5 GND
ML_LANE 1(p)	4	9 ML_LANE 1(p)
ML_LANE 1(n)	6	13 ML_LANE 1(n)
GND	5	11 GND
ML_LANE 2(p)	7	15 ML_LANE 2(p)
ML_LANE 2(n)	9	19 ML_LANE 2(n)
GND	8	17 GND
ML_LANE 3(p)	10	21 ML_LANE 3(p)
ML_LANE 3(n)	12	25 ML_LANE 3(n)
GND	11	23 GND
CONFIG1	13	10 CONFIG1
CONFIG2	14	8 CONFIG2
AUX CH(p)	15	20 AUX CH(p)
AUX CH(n)	17	22 AUX CH(n)
GND	16	18 GND
HOT PLUG DETECT	18	14 HOT PLUG DETECT
DP_PWR RETURN	19	24 DP_PWR RETURN
DP_PWR	20	26 DP_PWR
		12 GND
		6 GND
		1 NC
		2 NC
		16 NC
		4 (TO SHIELD)

SHIELD SHELL

DISPLAYPORT ORIENTATION OPTIONS (PARTIAL FRONT VIEWS SHOWN)



RECOMMENDED MOUNTING HOLES
PANEL THICKNESS .288 MAX



DISPLAYPORT

MIL-DTL-38999 Series III Type Connectors



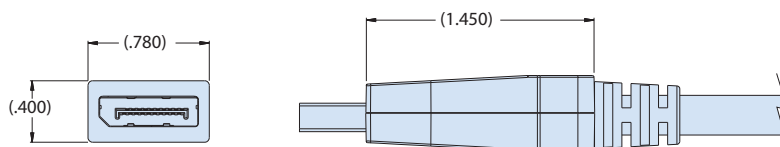
233-389 DisplayPort plug with strain relief cable sealing backshell

N

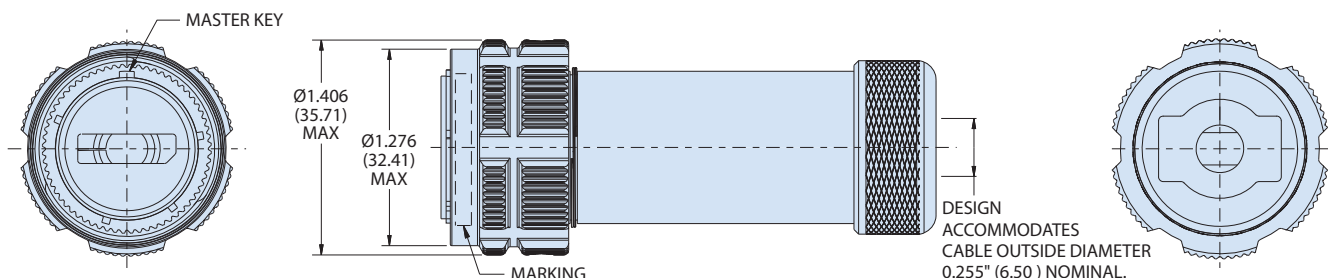
Material and Finish		
NF	Aluminum	Cadmium, Olive Drab Over Electroless Nickel (500 Hour Salt Spray)
ME		Electroless Nickel (96 Hour Salt Spray)
ZR		Black Zinc-Nickel (Tri-Valent CR)
ZI	Stainless Steel	Passivate
AB	Marine Bronze	None (Clean Only)

Additional material / finish options available consult factory

Part Number Development							
Sample Part Number	233-389	NF	G6	A	17	N	H
Basic Number	233-389						
Material/Finish	See Material and Finish table						
Connector Style	G6 = Plug						
Overmold Boot Style	A						
Shell Size	17						
Alternate Position	A, B, C, D, E, N = Normal per MIL-DTL-38999						
DisplayPort Orientation	H = Horizontal V = Vertical						



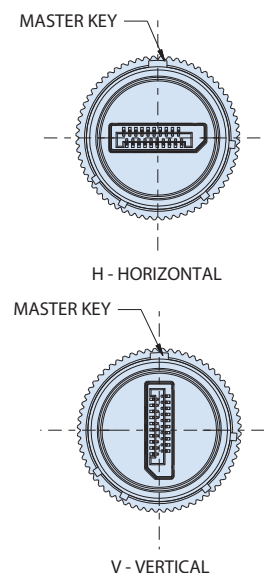
RECOMMENDED DISPLAYPORT PLUG OVERMOLD - STYLE A



NOTES

- Interpret drawing per ASME Y14.5 - 2009.
- Modified major diameter 31.80 - 31.95 (1.252 - 1.257).
- Material/finishes:
 - Barrel, coupling nut: see Material/Finish table (composite coupling nut no plating required).
 - Insulators: high grade rigid dielectric/N.A.
 - Seals: silicone based elastomer
 - USB adapter housing: UL94V-0 compliant ABS or PPS
 - Hardware: stainless steel/passivated
- Displayport specifications:
 - Performance: DP 1.4
 - D.W.V.: 500 VAC (unmated)
 - I.R.: 100 Mega ohms min.
 - Operating temperature range: -20°C to +85°C
- Front panel mount only.
- Plug connector designed to meet IP68 unmated condition.
- Design accommodates cable outside diameter 0.255" (6.50 mm) nominal.

DISPLAYPORT ORIENTATION OPTIONS



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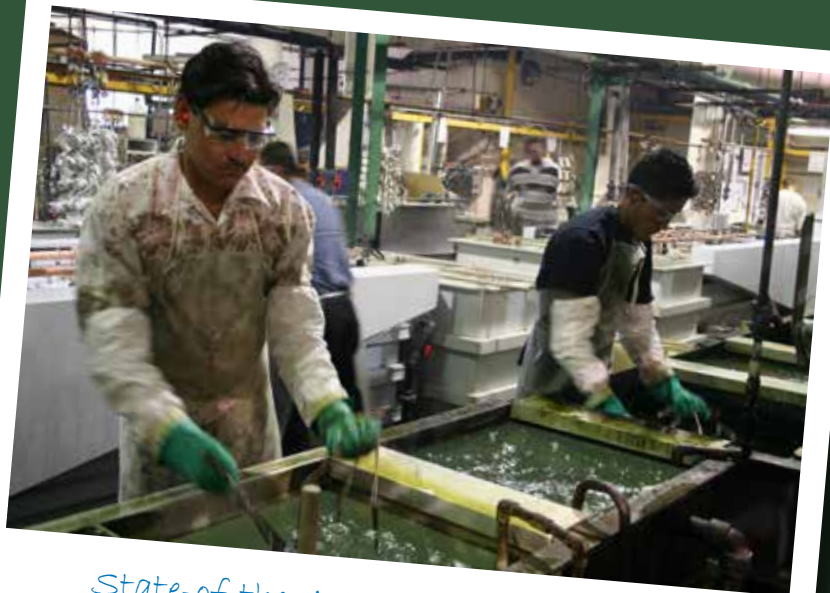
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